

# Search Report

## EIC 1700

STIC Database Tracking Number: 243085

To: MICHAEL BERNSHTEYN  
Location: REM-10D25  
Art Unit: 1796  
Thursday, November 15, 2007  
  
Case Serial Number: 10/817371

From: USHA SHRESTHA  
Location: EIC1700  
REM-4B28 / REM-4B31  
Phone: (571)272-3519  
  
[usha.shrestha@uspto.gov](mailto:usha.shrestha@uspto.gov)

### Search Notes

Examiner BERNSHTEYN:

Please see the search results, feel free to contact me if you have any questions or if you like to refine the search query. Thank you for using STIC services!

Regards,  
Usha



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 1713

➤ Relevant prior art found, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art not found:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

please do it asap.

Lee Choi

RUSH

Access DB# 243085

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: MICHAEL BERNSHTEIN Examiner #: 81515 Date: 11/14/07  
Art Unit: 1796 Phone Number 30 2-2411 Serial Number: 10/817,371  
Mail Box and Bldg/Room Location: REM 10025 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Process for the preparation of stable polymer concentrate

Inventors (please provide full names): Matthias Loeferle,  
Roman Morschhaeuser

Earliest Priority Filing Date: 04/03/2003

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please, try to find a process for the preparation of concentrates comprising a copolymer of units (1) and (2), and the steps of A), B) and C) according to claim 1

Thank you M. Bernshstein

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STAFF USE ONLY

Type of Search

Vendors and cost where applicable

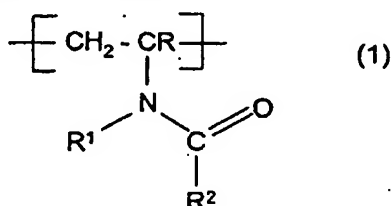
Practitioner's Docket: 2003DE417  
Serial No.: 10/817,371  
Page 2

### In the Claims

1. (currently amended) A process for the preparation of concentrates in liquid or liquid-disperse form comprising

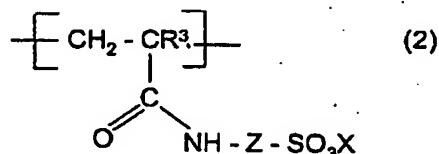
I) 10 to 80% by weight of a copolymer comprising

a) 1 to 50% by weight of a repeat structural unit of the formula (1)



wherein R, R<sup>1</sup> and R<sup>2</sup> are identical or different and are hydrogen, a linear or branched alkyl group having in each case 1 to 30 carbon atoms, a linear or branched alkenyl group having in each case 2 to 30 carbon atoms, or R<sup>1</sup> and R<sup>2</sup> together are a C<sub>2</sub>-C<sub>6</sub>-alkylene group,

b) 49.99 to 98.99% by weight of the repeat structural unit of the formula (2)



In which R<sup>3</sup> is hydrogen, methyl or ethyl, Z is C<sub>1</sub>-C<sub>8</sub>-alkylene and X is an ammonium, alkali metal or alkaline earth metal ion, and

c) 0.01 to 8% by weight of crosslinking structures formed from monomers with at least two olefinic double bonds,

II) 20 to 90% by weight of one or more emulsifiers, a solvent, solvent mixture or mixtures thereof, and

III) 0 to 30% by weight of water,

wherein the concentrate is made by a process comprising the steps of



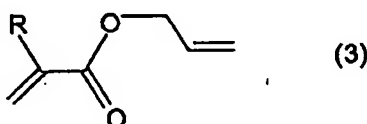
Practitioner's Docket: 2003DE417  
Serial No.: 10/817,371  
Page 3

- A) free radically copolymerizing the components a), b) and c) to form a polymer in a polymerization medium, which behaves largely inertly with regard to free-radical polymerization reactions and permits the formation of high molecular weights,  
B) subsequently adding a higher-boiling solvent, or solvent mixture, one or more emulsifiers and mixtures thereof to the mixture of polymer and polymerization medium, where the boiling point of the higher-boiling solvent or solvent mixture is at least 10°C higher than that of the polymerization medium used for the polymerization and  
C) removing the polymerization medium without isolating the polymer via a filtration step.

2. (previously presented) The process in accordance with claim 1, wherein the copolymer comprises 2 to 30% by weight of structural units of the formula (1), 69.5 to 97.5% by weight of structural units of the formula (2), and 0.2 to 3% by weight of crosslinking structures formed from monomers with at least two olefinic double bonds.

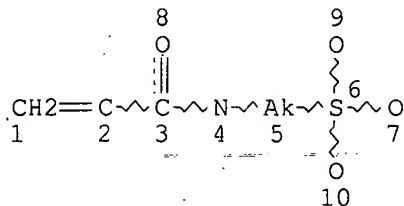
3. (previously presented) The process in accordance with claim 1, wherein the copolymer has crosslinking structures formed from monomers with at least two olefinic double bonds and are derived from acrylic or methacrylic allyl ester, dipropylene glycol diallyl ether, polyglycol diallyl ether, triethylene glycol divinyl ether, hydroquinone diallyl ether, tetraallyloxyethane, allyl or vinyl ethers of multifunctional alcohols, tetraethylene glycol diacrylate, triallylamine, trimethylopropane diallyl ether, methylenebisacrylamide or divinylbenzene.

4. (previously presented) The process in accordance with claim 1, wherein the copolymer has crosslinking structures derived from monomers of the formula (3),



In which R is hydrogen, methyl or ethyl.

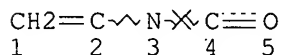
L4 STR



DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 10

L8 STR



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NSPEC      IS RC      AT      3
NSPEC      IS RC      AT      4
DEFAULT    MLEVEL IS ATOM
DEFAULT    ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 5

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L10      342 SEA FILE=REGISTRY SSS FUL L4 AND L8
L12      STR
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DEFAULT ECLEVEL IS LIMITED

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 4

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L15      52 SEA FILE=HCAPLUS ABB=ON PLU=ON L14
L17      35 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND PREP/RL
L18      8 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND OLEFIN?
L19      94408 SEA FILE=HCAPLUS ABB=ON PLU=ON OLEFINS+PFT,NT/CT
L20      0 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND L19
L21      0 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L19
L22      35 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 OR L18 OR L20 OR L21
L24      413 SEA FILE=HCAPLUS ABB=ON PLU=ON L10

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L25 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND L19  
 L26 QUE ABB=ON PLU=ON ALKENE? OR ETHYLEN? OR PROPYLEN? OR BUTYLEN?  
 L27 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L26  
 L28 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 OR L25  
 L29 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (1840-2003)/PRY,A  
 Y,PY  
 L30 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 OR L29  
 L31 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L30  
 L32 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 OR L30  
 L33 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 NOT L32  
 L34 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 AND (1840-2003)/PRY,AY  
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 L35 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND PREP/RL  
 L36 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L35

=> d l36 1-41 ibib ed abs hitstr hitind

L36 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2007:1210139 HCAPLUS  
 DOCUMENT NUMBER: 147:452384  
 TITLE: Polymer blend electrolyte membranes for fuel cells  
 employing liquid fuels, and manufacture of the  
 membranes  
 INVENTOR(S): Narishima, Daisuke; Tajima, Hiroshi  
 PATENT ASSIGNEE(S): Asahi Kasei Chemicals Corporation, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007280653	A	20071025	JP 2006-102607	20060404
PRIORITY APPLN. INFO.:			JP 2006-102607	20060404

ED Entered STN: 26 Oct 2007

AB Title membranes consist of (A) hydrophobic porous substrates containing graft polymerized nitrogen-containing monomers on pore surfaces, and (B) polymers of proton-dissociative monomers filled in the pores. Title membranes are manufactured by polymerizing proton-dissociative monomers in A. Alternatively, title membranes are manufactured by a process including steps of (1) polymerizing precursors of proton-dissociative monomers in A, and (2) allowing the resultant proton-dissociative polymers to react. The membranes show high proton conductivity and inhibit crossover of liquid fuels such as methanol.

IT 952411-39-1P  
 (electrolyte membranes; manufacture of fuel cell electrolyte membranes made of polymer blends)

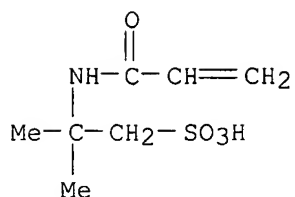
RN 952411-39-1 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

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CRN 15214-89-8

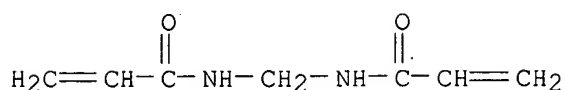
CMF C7 H13 N O4 S



CM 2

CRN 110-26-9

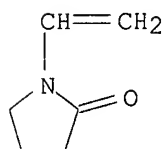
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CM 3

CRN 88-12-0

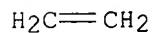
CMF C6 H9 N O



CM 4

CRN 74-85-1

CMF C2 H4



CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

Section cross-reference(s): 38

IT Polyisocyanurates

(complexes with **ethylene**-vinylpyrrolidone graft

copolymer, electrolyte membranes; manufacture of fuel cell electrolyte

membranes made of polymer blends)

IT 952411-38-0P 952411-39-1P

(electrolyte membranes; manufacture of fuel cell electrolyte membranes

made of polymer blends)

L36 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:591380 HCAPLUS

DOCUMENT NUMBER: 147:32279

TITLE: Polymer dispersions, process for their preparation

and use  
 INVENTOR(S): Bremer, Christian; Christian, Joachim;  
 Obermueller, Anja  
 PATENT ASSIGNEE(S): Allessachemie G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 50pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007059857	A1	20070531	WO 2006-EP10620	20061107
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
DE 102005056436	A1	20070531	DE 2005-102005056436	20051126
DE 102005063376	A1	20070531	DE 2005-102005063376	20051126
PRIORITY APPLN. INFO.:			DE 2005-102005056436A	20051126
			DE 2005-102005063376A	20051126

ED Entered STN: 01 Jun 2007

AB A storage stable dispersion with water content  $\geq 10$  weight% used in petroleum recovery comprises water-soluble copolymers dispersed in (poly)alkylene glycols and/or ethers, whereby water-soluble copolymers are prepared by copolymerizing  $\geq 1$  vinylamide carboxylic acid or nitrogen-containing heterocycle,  $\geq 1$  olefinically unsatd. sulfonic acid,  $\geq$  amide olefinically unsatd. carboxylic acid (not N-vinylamide), optionally olefinically unsatd. phosphonic acid and, optionally  $\geq 1$  olefinically unsatd. carboxylic acid. Thus, mixing 300 mL tert-butanol, 70 g PEG 400, 15 g AMPS, neutralizing to pH 7 - 8 with NH<sub>3</sub>, adding 27.5 g acrylamide, 7.5 g N-vinylformamide, 30 mL acetone and 0.5 g 1,1,1-tris(hydroxymethyl)propane trimethacrylate (crosslinker), heating 2 h at 70 - 80° in the presence of an initiator, removing solvents, drying in vacuum and dispersing 50 g a prepared copolymer in 367 g PEG 400 gave a stable dispersion having K value = 720.

IT 938113-94-1P 938113-96-3P 938114-01-3P  
 938114-05-7P 938114-09-1P 938114-12-6P  
 938114-16-0P 938114-21-7P 938114-24-0P  
 938114-25-1P

(dispersed in (poly)alkylene glycols and/or ethers storage stable dispersions with water content  $\geq 10$  weight% used in petroleum recovery)

RN 938113-94-1 HCAPLUS

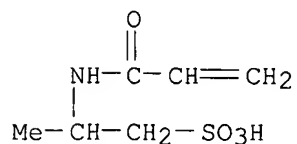
CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[[(2-methyl-1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] ester, polymer with ammonium 2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1),

N-ethenylformamide and 2-propenamide (CA INDEX NAME)

CM 1

CRN 155950-27-9

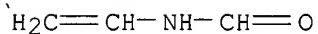
CMF C6 H11 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 13162-05-5

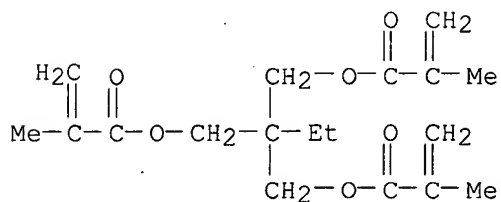
CMF C3 H5 N O



CM 3

CRN 3290-92-4

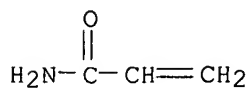
CMF C18 H26 O6



CM 4

CRN 79-06-1

CMF C3 H5 N O



RN 938113-96-3 HCAPLUS

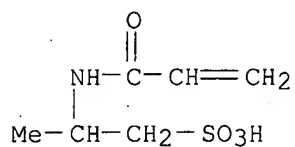
CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[(2-methyl-1-oxo-2-

propen-1-yl)oxy)methyl]-1,3-propanediyl] ester, polymer with ammonium  
2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), ethenyl  
acetate, N-ethenylformamide and 2-propenamide (CA INDEX NAME)

CM 1

CRN 155950-27-9

CMF C6 H11 N O4 S . H3 N

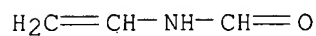


● NH<sub>3</sub>

CM 2

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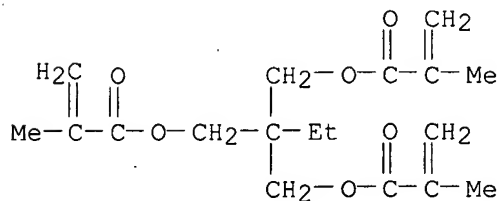
CMF C3 H5 N O



CM 3

CRN 3290-92-4

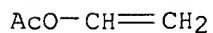
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CM 4

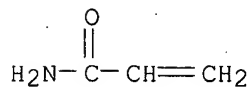
CRN 108-05-4

CMF C4 H6 O2



CM 5

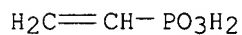
CRN 79-06-1  
CMF C3 H5 N O



RN 938114-01-3 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] ester, polymer with ammonium P-ethenylphosphonate (2:1), ammonium 2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), N-ethenylformamide and 2-propenamide (CA INDEX NAME)

CM 1

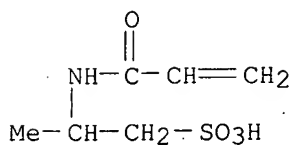
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● 2 NH<sub>3</sub>

CM 2

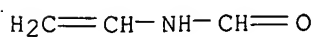
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CMF C6 H11 N O4 S . H3 N



● NH<sub>3</sub>

CM 3

CRN 13162-05-5  
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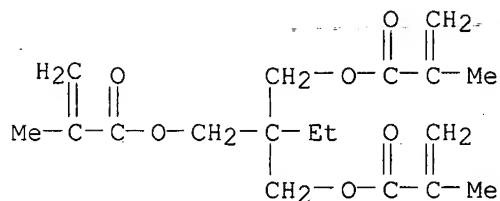




CM 4

CRN 3290-92-4

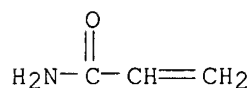
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CM 5

CRN 79-06-1

CMF C3 H5 N O



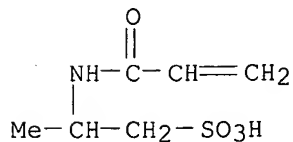
RN 938114-05-7 HCAPLUS

CN 1-Propanesulfonic acid, 2-[(1-oxo-2-propen-1-yl)amino]-, ammonium salt (1:1), polymer with 3,3',3'',3'''-[1,2-ethanediylidenetetrakis(oxy)]tetrakis[1-propene], N-ethenylformamide and 2-propenamide (CA INDEX NAME)

CM 1

CRN 155950-27-9

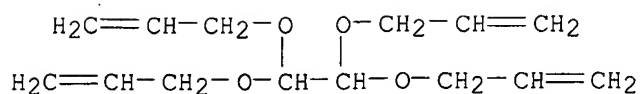
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● NH<sub>3</sub>

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CRN 16646-44-9

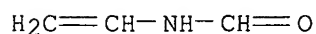
CMF C14 H22 O4



CM 3

CRN 13162-05-5

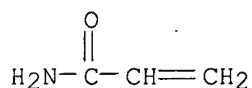
CMF C3 H5 N O



CM 4

CRN 79-06-1

CMF C3 H5 N O



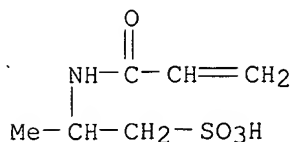
RN 938114-09-1 HCAPLUS

CN 1-Propanesulfonic acid, 2-[(1-oxo-2-propen-1-yl)amino]-, ammonium salt (1:1), polymer with N-ethenylformamide, 2-propenamide and 3-(2-propen-1-yloxy)-2,2-bis[(2-propen-1-yloxy)methyl]-1-propanol (CA INDEX NAME)

CM 1

CRN 155950-27-9

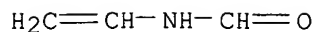
CMF C6 H11 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 13162-05-5

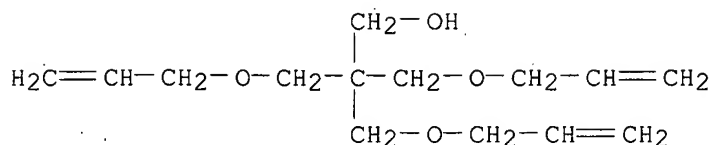
CMF C3 H5 N O



CM 3

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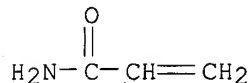
CMF C14 H24 O4



CM 4

CRN 79-06-1

CMF C3 H5 N O



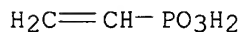
RN 938114-12-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[2-methyl-1-oxo-2-propen-1-yl)oxy)methyl]-1,3-propanediyl] ester, polymer with ammonium P-ethenylphosphonate (2:1), ammonium 2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), N-ethenylformamide and 1-ethenyl-2-pyrrolidinone (CA INDEX NAME)

CM 1

CRN 938114-00-2

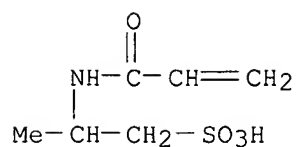
CMF C2 H5 O3 P . 2 H3 N

● 2 NH<sub>3</sub>

CM 2

CRN 155950-27-9

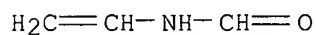
CMF C6 H11 N O4 S . H3 N

● NH<sub>3</sub>

CM 3

CRN 13162-05-5

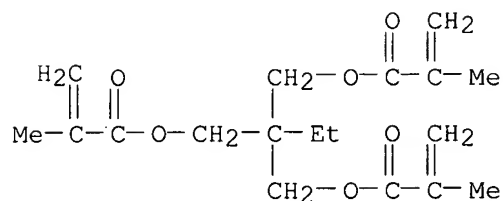
CMF C3 H5 N O



CM 4

CRN 3290-92-4

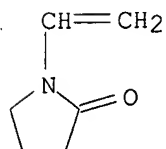
CMF C18 H26 O6



CM 5

CRN 88-12-0

CMF C6 H9 N O



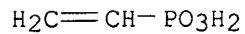
RN 938114-16-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[2-methyl-1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] ester, polymer with ammonium P-ethenylphosphonate (2:1), ammonium 2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), N-ethenylformamide, 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 938114-00-2

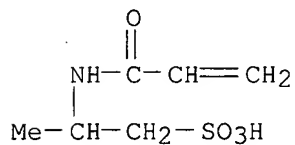
CMF C2 H5 O3 P . 2 H3 N

● 2 NH<sub>3</sub>

CM 2

CRN 155950-27-9

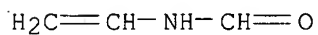
CMF C6 H11 N O4 S . H3 N

● NH<sub>3</sub>

CM 3

CRN 13162-05-5

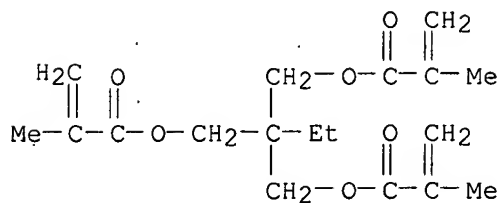
CMF C3 H5 N O



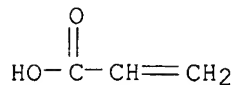
CM 4

CRN 3290-92-4

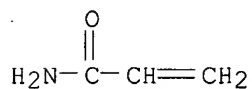
CMF C18 H26 O6



CM 5

CRN 79-10-7  
CMF C3 H4 O2

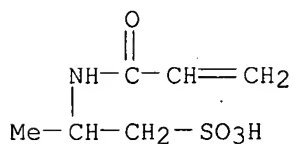
CM 6

CRN 79-06-1  
CMF C3 H5 N O

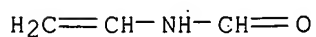
RN 938114-21-7 HCAPLUS

CN 1-Propanesulfonic acid, 2-[(1-oxo-2-propen-1-yl)amino]-, ammonium salt  
(1:1), polymer with 2,2-bis[(2-propen-1-yloxy)methyl]-1-butanol,  
N-ethenylformamide and 2-propenamide (9CI) (CA INDEX NAME).

CM 1

CRN 155950-27-9  
CMF C6 H11 N O4 S . H3 N● NH<sub>3</sub>

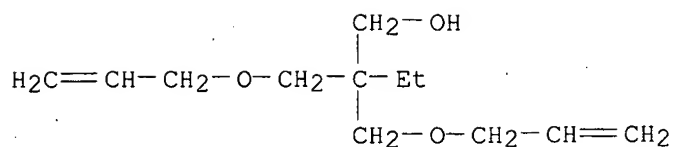
CM 2

CRN 13162-05-5  
CMF C3 H5 N O

CM 3

CRN 682-09-7

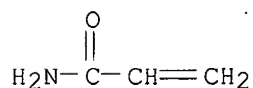
CMF C12 H22 O3



CM 4

CRN 79-06-1

CMF C3 H5 N O



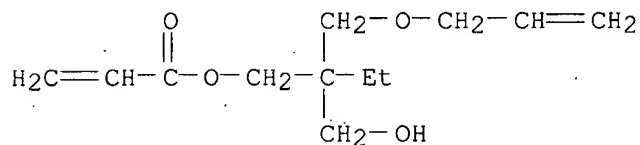
RN 938114-24-0 HCAPLUS

CN 2-Propenoic acid, 2-(hydroxymethyl)-2-[(2-propen-1-yloxy)methyl]butyl ester, polymer with ammonium P-ethenylphosphonate (2:1), ammonium 2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), N-ethenylformamide and 2-propenamide (CA INDEX NAME)

CM 1

CRN 938114-23-9

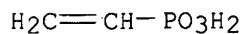
CMF C12 H20 O4



CM 2

CRN 938114-00-2

CMF C2 H5 O3 P . 2 H3 N

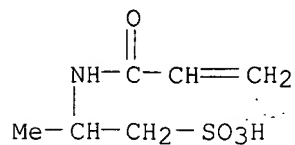


● 2 NH3

CM 3

CRN 155950-27-9

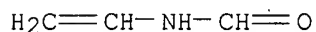
CMF C6 H11 N O4 S . H3 N

● NH<sub>3</sub>

CM 4

CRN 13162-05-5

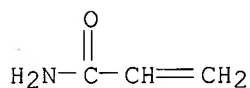
CMF C3 H5 N O



CM 5

CRN 79-06-1

CMF C3 H5 N O



RN 938114-25-1 HCAPLUS

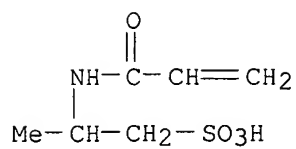
CN 2-Propenoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[ (2-methyl-1-oxo-2-propen-1-yl)oxy)methyl]-1,3-propanediyl] ester, polymer with ammonium 2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate (1:1), N-ethenylformamide, 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 155950-27-9

CMF C6 H11 N O4 S . H3 N

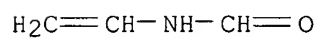


● NH<sub>3</sub>

CM 2

CRN 13162-05-5

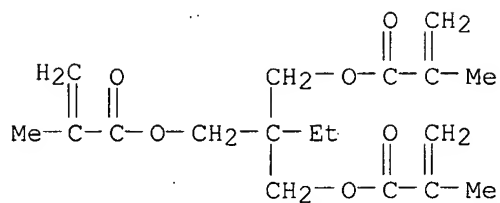
CMF C3 H5 N O



CM 3

CRN 3290-92-4

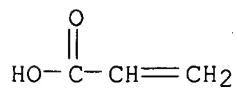
CMF C18 H26 O6



CM 4

CRN 79-10-7

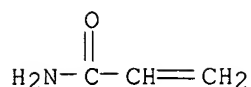
CMF C3 H4 O2



CM 5

CRN 79-06-1

CMF C3 H5 N O



CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 51

IT 938113-94-1P 938113-96-3P 938114-01-3P  
 938114-05-7P 938114-09-1P 938114-12-6P  
 938114-16-0P 938114-19-3P 938114-21-7P  
 938114-24-0P 938114-25-1P  
 (dispersed in (poly)alkylene glycols and/or ethers storage stable  
 dispersions with water content  $\geq 10$  weight% used in petroleum  
 recovery)

IT 57-55-6, 1,2-Propanediol, uses 107-21-1, 1,2-Ethenediol, uses  
 109-86-4, Ethylene glycol monomethyl ether 111-46-6,  
 Diethylene glycol, uses 111-76-2, Butyl glycol 25154-52-3,  
 Nonylphenol  
 (dispersed in (poly)alkylene glycols and/or ethers storage stable  
 dispersions with water content  $\geq 10$  weight% used in petroleum  
 recovery)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L36 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:126489 HCAPLUS

DOCUMENT NUMBER: 146:277307

TITLE: Method for manufacturing nanometer-scale  
 water-soluble microgel oil-displacing material

INVENTOR(S): Wu, Feipeng; Shi, Mengquan; Zhang, Yunlong; Zhang,  
 Yuxi; He, Yong

PATENT ASSIGNEE(S): Technical Institute of Physics and Chemistry of  
 Cas, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13pp.  
 CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1903974	A	20070131	CN 2005-10012255	20050726
PRIORITY APPLN. INFO.:			CN 2005-10012255	20050726

ED Entered STN: 05 Feb 2007

AB Water-soluble microgel nanometer-scale material for oil displacement in  
 polymerflood and surfactantflood petroleum recovery is manufactured from  
 acrylamide 10-30, a water-soluble anionic monomer 1-30, a third monomer  
 1-20, a surfactant 10-40, a first solvent 20-60, a second solvent 0-5,  
 water 15-30, and a crosslinking agent 0.1-10 weight% (based on total  
 monomer) and 0.1-3.0 weight% (based on total monomer) of a  
 photoinitiator. The water-soluble anionic monomer is selected one or  
 more of acrylic acid, sodium acrylate, methacrylic acid, sodium  
 methacrylate, sodium 2-acrylamido-2-methylpropanesulfonate, sodium  
 allylsulfonate, and sodium styrenesulfonate. The third monomer can be  
 one or more acrylamide derivs., acrylates, methacrylates,  
 N-vinylpyridine salts, and N-vinylpyrrolidone. The surfactant can be

one or more of Span, Tween, diisooctyl succinatesulfonate, sodium dodecylsulfonate, and cetyltrimethylammonium bromide. The first solvent can be one or more of aliphatic hydrocarbon, solvent oils, and aromatic hydrocarbons. The second solvent is one or more of benzene, toluene, and xylene. The crosslinking agent can be one or more of N,N-methylenebis(acrylamide), diallyldimethyl ammonium chloride, polyethylene glycol diacrylate, and pentaerythritol triacrylate. The photoinitiator can be one or more of benzoin, benzoin ethers, hydroxy or amino-substituted acetophenone derivs., and diazo initiators. The material is synthesized by polymerization of a mixture of acrylamide, the anionic monomer, and the third monomer to obtain a nanometer-scale terpolymer, and then carrying out reverse-phase emulsion polymerization without heating or at low temperature (0-10°) with a UV photoinitiator. The oil-displacement material is a transparent or semi-transparent reverse-phase microemulsion, and has water-phase spherical microgels with a diameter 20-200 nm. When the obtained oil-displacing material and surfactant are simultaneously added into water, the obtained oil-displacing material can disperse rapidly to form microgel with a particle size of 500 nm-5 µm.

IT 926937-37-3P

(nanometer-scale, water-soluble microgel polymeric particles for petroleum displacement recovery)

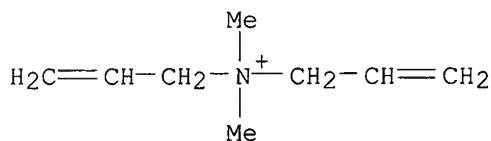
RN 926937-37-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propen-1-yl-, chloride (1:1), polymer with 1-ethenyl-2-pyrrolidinone, 2-propenamide and sodium 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

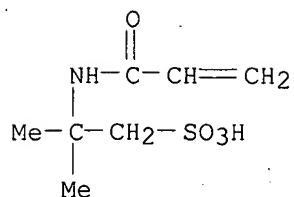


● Cl<sup>-</sup>

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

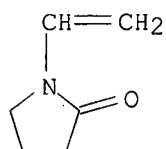


● Na

CM 3

CRN 88-12-0

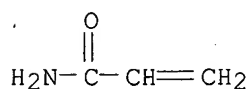
CMF C6 H9 N O



CM 4

CRN 79-06-1

CMF C3 H5 N O



CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 38

IT 146289-23-8P 926937-37-3P 926937-38-4P 926937-39-5P  
926937-40-8P

(nanometer-scale, water-soluble microgel polymeric particles for petroleum displacement recovery)

L36 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:8605 HCAPLUS

DOCUMENT NUMBER: 146:101639

TITLE: Polymer thickeners for acidic aqueous systems

INVENTOR(S): Zeng, Fanwen

PATENT ASSIGNEE(S): Rohm and Haas Company, USA

SOURCE: Eur. Pat. Appl., 15pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1739108	A1	20070103	EP 2006-252918	20060606
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
US 2007004851	A1	20070104	US 2006-473794	20060622
KR 2007001814	A	20070104	KR 2006-58464	20060628
JP 2007023275	A	20070201	JP 2006-177496	20060628
PRIORITY APPLN. INFO.:			US 2005-695198P	P 20050629

ED Entered STN: 03 Jan 2007

AB A polymer comprises 15-65% of sulfonic acid monomer residues, 15-70% of acrylamide residues, 2-20% of hydrophobic monomer residues, and 0.25-1.5% of crosslinker residues, the hydrophobic monomer being selected from alkyl (meth)acrylates, vinyl alkanoates, N-vinyl alkylamides, and N-alkyl (meth)acrylamides having C6-C25-alkyl groups. The polymer can be used as a viscosity modifier for aqueous compns. of low pH. Thus, a copolymer comprising acrylamide (32), 2-acrylamido-2-methylpropanesulfonic acid (58), and stearyl methacrylate (10%) crosslinked with 1% of methylenebisacrylamide was prepared by radical suspension polymerization in tert-butanol.

IT 335157-63-6, 2-Acrylamido-2-methylpropanesulfonic acid-methylenebisacrylamide-N-vinylpyrrolidone copolymer (polymer thickeners for acidic aqueous systems)

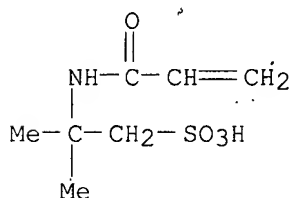
RN 335157-63-6 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone and N,N'-methylenebis[2-propenamide] (CA INDEX NAME)

CM 1

CRN 15214-89-8

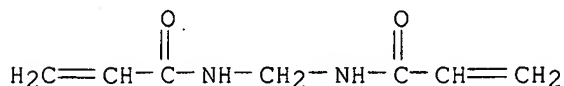
CMF C7 H13 N O4 S



CM 2

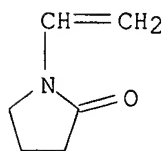
CRN 110-26-9

CMF C7 H10 N2 O2



CM 3

CRN 88-12-0  
CMF C6 H9 N O



CC 37-3 (Plastics Manufacture and Processing)  
IT 25736-86-1D, Poly(ethylene glycol) monomethacrylate, C16-C18-alkyl ethers, polymers with acrylamidomethylpropanesulfonic acid methylenebisacrylamide and acrylates 70144-13-7, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-methylenebisacrylamide copolymer 335157-63-6, 2-Acrylamido-2-methylpropanesulfonic acid-methylenebisacrylamide-N-vinylpyrrolidone copolymer 497221-29-1, 2-Acrylamido-2-methylpropanesulfonic acid-acrylic acid-methylenebisacrylamide-stearyl methacrylate copolymer 917611-25-7, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-stearyl methacrylate copolymer 917611-26-8, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-lauryl methacrylate-methylenebisacrylamide copolymer 917611-27-9, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-cetyl methacrylate-methylenebisacrylamide copolymer 917611-28-0, 2-Acrylamido-2-methylpropanesulfonic acid-ethyl acrylate-methylenebisacrylamide-stearyl methacrylate copolymer 917611-29-1, 2-Acrylamido-2-methylpropanesulfonic acid-methacrylic acid-methylenebisacrylamide-stearyl methacrylate copolymer 917611-30-4, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-divinylbenzene-stearyl methacrylate copolymer 917611-31-5D, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid-methylenebisacrylamide-oxirane graft copolymer, C16-C18-alkyl ethers 917611-32-6D, 2-Acrylamido-2-methylpropanesulfonic acid-ethyl acrylate-methylenebisacrylamide-oxirane-stearyl methacrylate graft copolymer, C16-C18-alkyl ethers 917611-33-7D, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-methylenebisacrylamide-oxirane-stearyl methacrylate graft copolymer, C16-C18-alkyl ethers (polymer thickeners for acidic aqueous systems)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2005:404904 HCAPLUS  
DOCUMENT NUMBER: 142:451465  
TITLE: Cosmetic, pharmaceutical and dermatological preparations containing N-vinylcaprolactam-acrylamidomethylpropane sulfonic acid-acrylate copolymers  
INVENTOR(S): Milbradt, Robert; Stelter, Wibke; Hornung, Michael; Lo Vasco, Sebastiano  
PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany  
SOURCE: Ger. Offen., 41 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102004050239	A1	20050512	DE 2004-102004050239	20041015
EP 1647267	A1	20060419	EP 2005-21920	20051007
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2006111627	A	20060427	JP 2005-300211	20051014
US 2006110352	A1	20060525	US 2005-250756	20051014
PRIORITY APPLN. INFO.:			DE 2004-102004050239A	20041015

ED Entered STN: 12 May 2005

AB The invention concerns cosmetic, pharmaceutical and dermatol. prepsns. that contain copolymers of N-vinylcaprolactam with acrylamidomethylpropane sulfonic acid and monomers with at least two olefinic double bonds. Thus a copolymer was synthesized from 2-acrylamido-2-methylpropane sulfonic acid, N-vinylcaprolactam and methacrylic acid allyl ester. The copolymer was included as a 0.40 weight/weight% ingredient in a skin lotion that further contained (weight/weight%): Hostaphat KL 340 D 1.00; mineral oil, low viscosity 8.00; iso-Pr palmitate 3.00; cetearyl alc. 0.50; Myritol 318 2.00; Tegin M 0.50; SilCare 41M15 1.00; glycerin 5.00; perfume 0.30; alc. 5.00; tocopheryl acetate 1.00; Nipaguard PDU q.s.; water to 100.

IT 851388-47-1P 851388-48-2P

(cosmetic, pharmaceutical and dermatol. prepsns. containing N-vinylcaprolactam-acrylamidomethylpropane sulfonic acid-acrylate copolymers)

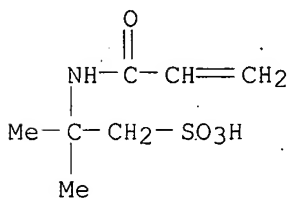
RN 851388-47-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenylhexahydro-2H-azepin-2-one and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

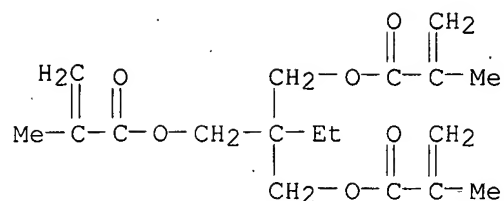
CMF C7 H13 N O4 S



CM 2

CRN 3290-92-4

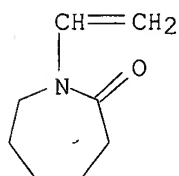
CMF C18 H26 O6



CM 3

CRN 2235-00-9

CMF C8 H13 N O



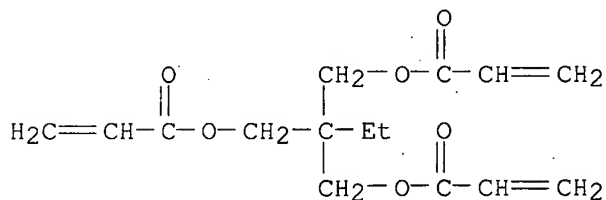
RN 851388-48-2 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenylhexahydro-2H-azepin-2-one and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5

CMF C15 H20 O6

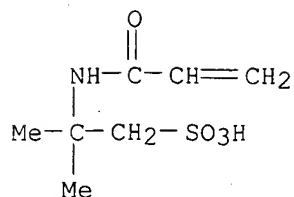


CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S

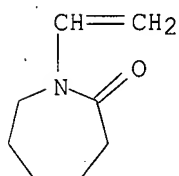




CM 3

CRN 2235-00-9

CMF C8 H13 N O



IT 851388-46-0P

(cosmetic, pharmaceutical and dermatol. preps. containing  
N-vinylcaprolactam-acrylamidomethylpropane sulfonic acid-allyl  
methacrylate copolymers)

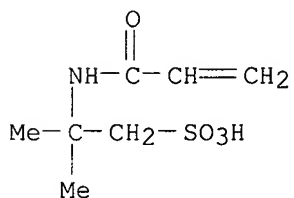
RN 851388-46-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
1-ethenylhexahydro-2H-azepin-2-one and 2-methyl-2-[(1-oxo-2-  
propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

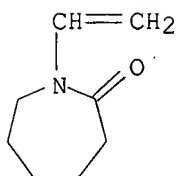
CMF C7 H13 N O4 S



CM 2

CRN 2235-00-9

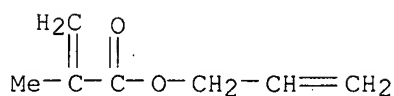
CMF C8 H13 N O



CM 3

CRN 96-05-9

CMF C7 H10 O2



IC ICM A61K007-40  
 ICS A61K007-42; A61K007-48; A61K007-02; A61K007-021; A61K047-32;  
 A61K007-13  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 38, 63  
 IT 851388-47-1P 851388-48-2P  
 (cosmetic, pharmaceutical and dermatol. prepns. containing  
 N-vinylcaprolactam-acrylamidomethylpropane sulfonic acid-acrylate  
 copolymers)  
 IT 851388-46-0P  
 (cosmetic, pharmaceutical and dermatol. prepns. containing  
 N-vinylcaprolactam-acrylamidomethylpropane sulfonic acid-allyl  
 methacrylate copolymers)

L36 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:367932 HCAPLUS

DOCUMENT NUMBER: 142:412264

TITLE: New concentrated inverse latex, its preparation  
process and its industrial uses

INVENTOR(S): Mallo, Paul; Braun, Olivier

PATENT ASSIGNEE(S): Societe d'Exploitation de Produits pour les  
Industries Chimiques SEPPIC, Fr.

SOURCE: Fr. Demande, 48 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2861397	A1	20050429	FR 2003-50717	20031022
FR 2861397	B1	20060120		
WO 2005040230	A2	20050506	WO 2004-FR50492	20041007
WO 2005040230	A3	20050818		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,  
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,  
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,  
 SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
 VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,  
 DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,  
 PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG  
 EP 1680450 A2 20060719 EP 2004-805735 20041007  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK  
 CN 1871261 A 20061129 CN 2004-80031337 20041007  
 JP 2007509217 T 20070412 JP 2006-536136 20041007  
 US 2007219315 A1 20070920 US 2006-576736 20061110  
 PRIORITY APPLN. INFO.: FR 2003-50717 A 20031022  
 WO 2004-FR50492 W 20041007

ED Entered STN: 29 Apr 2005

AB A concentrated inverse latex comprises (a) linear, branched or crosslinked organic polymer 50-80, (b) a water-in-oil-type emulsifying agent 5-10, (c) an oil 5-45, and (d) water 0-5%. The concentrated inverse latex can be used as a thickener and/or emulsifying agent for cosmetic or pharmaceutical compns., etc.

IT 850303-42-3P

(concentrated inverse latex, its preparation process and its industrial uses)

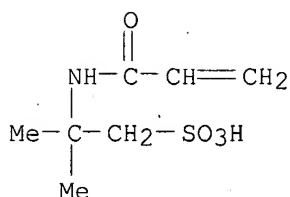
RN 850303-42-3 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 1-ethenyl-2-pyrrolidinone, N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

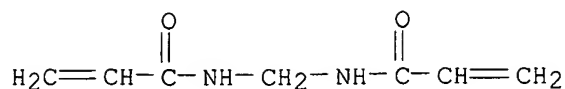


● Na

CM 2

CRN 110-26-9

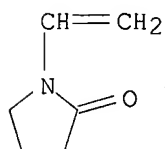
CMF C7 H10 N2 O2



CM 3

CRN 88-12-0

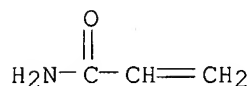
CMF C6 H9 N O



CM 4

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F002-32

ICS C08L033-00; A61K007-48; D06P001-52

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 63

IT 27791-59-9P, Acrylamide-acrylic acid-methylenebis(acrylamide)  
 copolymer 96721-19-6P, Acrylamide-methylenebis(acrylamide)-sodium  
 2-acrylamido-2-methylpropanesulfonate copolymer 109536-70-1P  
 850303-41-2P **850303-42-3P**

(concentrated inverse latex, its preparation process and its industrial  
 uses)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L36 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:841753 HCAPLUS

DOCUMENT NUMBER: 141:332646

TITLE: Manufacture of stable liquid concentrates of  
 N-acryloyldimethyltaurine copolymers

INVENTOR(S): Loeffler, Matthias; Morschhaeuser, Roman

PATENT ASSIGNEE(S): Clariant GmbH, Germany

SOURCE: Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10315182	A1	20041014	DE 2003-10315182	20030403
EP 1475079	A1	20041110	EP 2004-7373	20040326
EP 1475079	B1	20060614		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
ES 2266944	T3	20070301	ES 2004-4007373	20040326
US 2005107519	A1	20050519	US 2004-817371	20040402
PRIORITY APPLN. INFO.:			DE 2003-10315182	A 20030403

ED Entered STN: 15 Oct 2004

AB The title concs., useful for the production of cosmetic, pharmaceutical and dermatol. preps., contain 10-80% of a copolymer based on N-acryloyldimethyltaurine and/or its salts (structures specified), 20-90% of  $\geq 1$  emulsifier, a solvent or a solvent mixture, and 0-30% H<sub>2</sub>O. The concs. were manufactured by adding to the reaction mixture (after the radical polymerization was completed) a solvent b. higher than the solvent(s) used for polymerization and removing the lower-b. solvent(s) by distillation. The copolymers are optionally crosslinked by use of comonomers comprising 2. olefinic C:C bonds. For example, adding 80 g 2-acrylamido-2-methylpropanesulfonic acid to 500 g Me<sub>3</sub>COH with stirring, neutralizing the acid with NH<sub>3</sub>(g), adding 5 g N-vinylpyrrolidone and 2.0 g trimethylolpropane triacrylate (crosslinker), heating the mixture to 60° under N and adding 2 g dilauroyl peroxide started exothermic polymerization reaction which was completed by refluxing for 2 h to give the copolymer suspension. Adding 90 g Hostaphat KL 340D, 75 g Emulsogen SRO, 20 g low-viscosity mineral oil and 20 g iso-Pr palmitate to the suspension and removing bulk of Me<sub>3</sub>COH by distillation in vacuo gave a title concentrate that was used

as

a component of a sunscreen lotion.

IT **288155-97-5P**, 2-Acrylamido-2-methylpropanesulfonic acid ammonium salt-Trimethylolpropane triacrylate-N-Vinylformamide copolymer **471908-73-3P**, 2-Acrylamido-2-methylpropanesulfonic acid ammonium salt-Trimethylolpropane triacrylate-N-Vinyl-2-pyrrolidone copolymer

(crosslinked; manufacture of stable liquid concs. of N-acryloyldimethyltaurine copolymers)

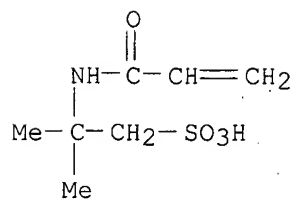
RN 288155-97-5 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with N-ethenylformamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

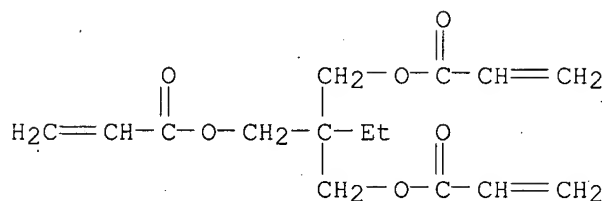
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

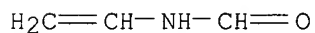
CMF C15 H20 O6



CM 3

CRN 13162-05-5

CMF C3 H5 N O



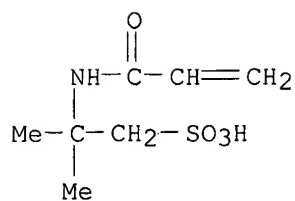
RN 471908-73-3 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

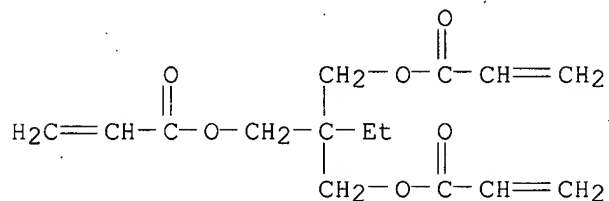
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

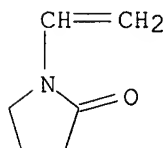
CMF C15 H20 O6



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08F226-10

ICS C08F220-58

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 62

IT **288155-97-5P**, 2-Acrylamido-2-methylpropanesulfonic acid ammonium salt-Trimethylolpropane triacrylate-N-Vinylformamide copolymer **471908-73-3P**, 2-Acrylamido-2-methylpropanesulfonic acid ammonium salt-Trimethylolpropane triacrylate-N-Vinyl-2-pyrrolidone copolymer

(crosslinked; manufacture of stable liquid concs. of N-acryloyldimethyltaurine copolymers)

L36 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:656479 HCAPLUS

DOCUMENT NUMBER: 139:192919

TITLE: Preparation of acryloyldimethyltaurate polymers as

adjuvants in pesticide formulations  
 INVENTOR(S): Walter, Michael Marcus; Morschhaeuser, Roman;  
 Zerrer, Ralf  
 PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 43 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003067981	A1	20030821	WO 2003-EP1272	20030210
W: BR, CA, MX, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,				
IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
DE 10206468	A1	20030828	DE 2002-10206468	20020216
PRIORITY APPLN. INFO.:			DE 2002-10206468	A 20020216

ED Entered STN: 22 Aug 2003

AB The invention relates to pesticide formulation adjuvants containing at least one copolymer, obtained by radical copolymerization of (A) acryloyldimethyltaurine acid and/or acryloyldimethyltaurates, (B) optionally, one or more other **olefinically-unsaturated**, noncationic comonomers, (C) optionally one or more **olefinically-unsaturated**, cationic comonomers, (D) optionally one or more components containing silicon, (E) optionally one or more components containing fluorine, (F) optionally one or more macromonomers, (G) whereby the copolymerization occurs optionally in the presence of at least one polymer additive, (H) under the proviso that component (A) is copolymerized with at least one component selected from one of the groups (D) to (G).

IT 582309-48-6DP, salts

(preparation as adjuvant in pesticide formulations)

RN 582309-48-6 HCAPLUS

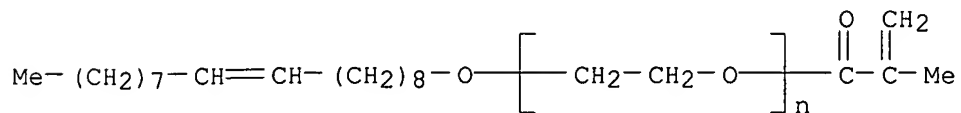
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N-ethenylformamide, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(9Z)-9-octadecenyl]oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 176110-19-3

CMF (C2 H4 O)<sub>n</sub> C22 H40 O2

CCI PMS

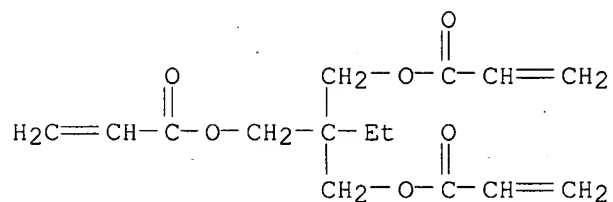


CM 2

CRN 15625-89-5

CMF C15 H20 O6

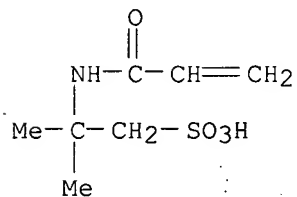




CM 3

CRN 15214-89-8

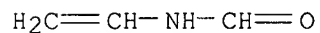
CMF C7 H13 N O4 S



CM 4

CRN 13162-05-5

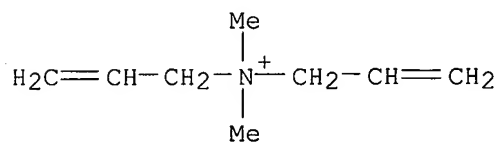
CMF C3 H5 N O



CM 5

CRN 7398-69-8

CMF C8 H16 N . Cl

● Cl<sup>-</sup>

IC ICM A01N025-10

ICS A01N025-30

CC 5-3 (Agrochemical Bioregulators)

Section cross-reference(s): 38

IT 79-06-1DP, Acrylamide, polymers with fatty alc. derivs. of

(meth)acrylic and unsatd. monomers 88-12-0DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 96-05-9DP, Allyl methacrylate, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 110-26-9DP, Methylenebisacrylamide, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 868-77-9DP, 2-Hydroxyethyl methacrylate, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 1338-43-8DP, Span 80, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 1746-03-8DP, Vinylphosphonic acid, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 5039-78-1DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 7398-69-8DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 13162-05-5DP, n-Vinylformamide, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 15214-89-8DP, fatty alc. derivs. of (meth)acrylic and unsatd. monomers 15214-89-8DP, AMPS, polymers with ethoxylated C12-15-alkyl acrylates and itaconates, salts 15625-89-5DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 26403-58-7DP, Polyethylene glycol monoacrylate, C12-15-alkyl ethers, polymers with AMPS, salts 26915-72-0DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 45708-78-9DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 102583-40-4DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 134367-40-1P 190735-24-1DP, Fluowet ac 812, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 214559-58-7DP, C12-15-alkyl ethers, polymers with AMPS, salts 433922-59-9DP, salts 434286-58-5DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 434286-60-9DP, polymers with fatty alc. derivs. of (meth)acrylic and unsatd. monomers 434942-13-9DP, salts 434942-13-9P 582309-44-2DP, salts 582309-45-3DP, salts 582309-46-4DP, salts 582309-47-5DP, salts 582309-48-6DP, salts 582315-49-9DP, salts 582315-50-2DP, salts 582315-52-4DP, salts 583024-29-7DP, salts

(preparation as adjuvant in pesticide formulations)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:550416 HCAPLUS

DOCUMENT NUMBER: 139:102365

TITLE: Antistatic fiber structures with good flexibility and moisture absorbing/desorbing properties

INVENTOR(S): Irisa, Takeshi; Ishii, Masaki; Saito, Koichi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003201673	A	20030718	JP 2001-396484	20011227
PRIORITY APPLN. INFO.:			JP 2001-396484	20011227

ED Entered STN: 18 Jul 2003

AB The fiber structures have polymers containing  $\geq 2\%$  poly(N-vinylactam) on the fiber surface. Thus, a polyester fabric

was immersed in a solution containing N-vinylpyrrolidone and ammonium persulfate, dried, treated with steam, and heat-set to give a test piece showing good laundry fastness.

IT 195819-29-5P 560130-41-8P

(antistatic fabrics having vinyl lactam polymer surface coatings with good flexibility and moisture controlling properties)

RN 195819-29-5 HCAPLUS

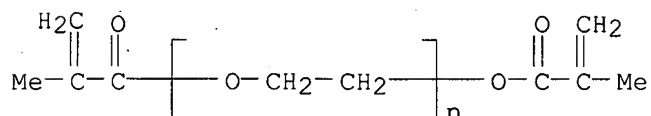
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI)  
(CA INDEX NAME)

CM 1

CRN 25852-47-5

CMF (C2 H4 O)<sub>n</sub> C8 H10 O3

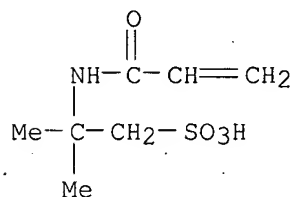
CCI PMS



CM 2

CRN 15214-89-8

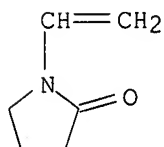
CMF C7 H13 N O4 S



CM 3

CRN 88-12-0

CMF C6 H9 N O



RN 560130-41-8 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone,  $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and  $\alpha$ -(2-methyl-1-oxo-2-

propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

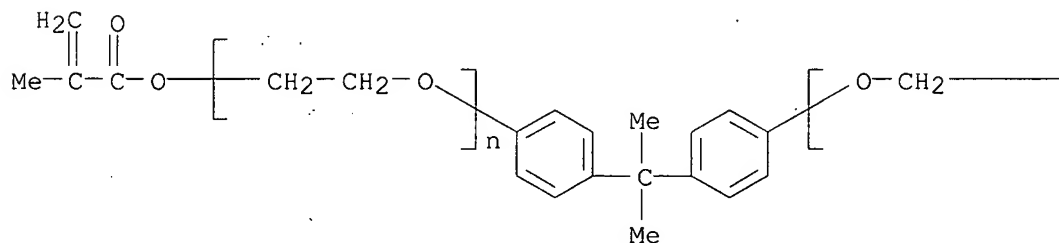
CM 1

CRN 41637-38-1

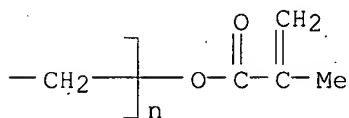
CMF (C2 H4 O)<sub>n</sub> (C2 H4 O)<sub>n</sub> C23 H24 O4

CCI PMS

PAGE 1-A



PAGE 1-B

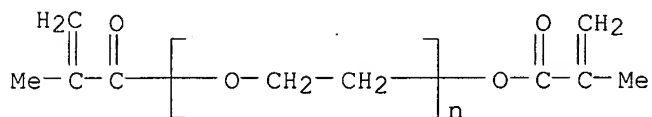


CM 2

CRN 25852-47-5

CMF (C2 H4 O)<sub>n</sub> C8 H10 O3

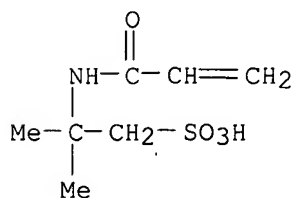
CCI PMS



CM 3

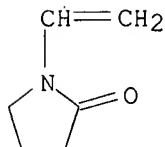
CRN 15214-89-8

CMF C7 H13 N O4 S



CM 4

CRN 88-12-0  
CMF C6 H9 N O



IC ICM D06M015-356  
CC 40-7 (Textiles and Fibers)  
IT 9003-39-8P, N-Vinylpyrrolidone homopolymer 195819-29-5P  
560130-41-8P  
(antistatic fabrics having vinyl lactam polymer surface coatings  
with good flexibility and moisture controlling properties)

L36 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:221970 HCAPLUS  
DOCUMENT NUMBER: 138:240685  
TITLE: Hydrophilic polymers and their use in  
electrochemical cells  
INVENTOR(S): Highgate, Donald James  
PATENT ASSIGNEE(S): ITM Power Ltd., UK  
SOURCE: PCT Int. Appl., 34 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003023890	A2	20030320	WO 2002-GB4095	20020909
WO 2003023890	A3	20040219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003113603	A1	20030619	US 2002-236665	20020906
CA 2459340	A1	20030320	CA 2002-2459340	20020909
AU 2002321637	A1	20030324	AU 2002-321637	20020909
GB 2380055	A	20030326	GB 2002-20892	20020909
GB 2380055	B	20030910		
EP 1428284	A2	20040616	EP 2002-755347	20020909
EP 1428284	B1	20051221		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK CN 1565066				
	A	20050112	CN 2002-819812	20020909

JP 2005502990	T	20050127	JP 2003-527827	20020909
AT 313858	T	20060115	AT 2002-755347	20020909
EP 1643581	A2	20060405	EP 2005-77932	20020909
EP 1643581	A3	20070502		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO, CY, TR, BG, CZ, EE, SK				
ES 2256513	T3	20060716	ES 2002-2755347	20020909
NZ 531551	A	20070330	NZ 2002-531551	20020909
MX 2004PA02161	A	20040629	MX 2004-PA2161	20040305
ZA 2004001844	A	20050307	ZA 2004-1844	20040305
IN 2004DN00798	A	20060721	IN 2004-DN798	20040329
HK 1067790	A1	20060811	HK 2004-109917	20041214
PRIORITY APPLN. INFO.:			GB 2001-21714	A 20010907
			GB 2002-421	A 20020109
			GB 2002-422	A 20020109
			EP 2002-755347	A3 20020909
			WO 2002-GB4095	W 20020909

ED Entered STN: 21 Mar 2003

AB A hydrophilic crosslinked polymer obtainable by copolymerization of hydrophobic and hydrophilic monomers that give a crosslinked hydrophilic polymer on polymerization; a monomer including a strongly ionic group; and water is useful as the membrane in an assembly that can be used in an electrolyzer or fuel cell. More generally, a membrane electrode assembly comprises electrodes and an ion-exchange membrane which comprises a hydrophilic polymer including a strongly ionic group. A method for producing a membrane electrode assembly comprising electrodes and an ion-exchange membrane, comprises introducing between the electrodes a material or materials from which the membrane can be formed, and forming the membrane in situ.

IT 502135-77-5, 2-Acrylamido-2-methyl-1-propanesulfonic acid-acrylonitrile-allyl methacrylate-1-vinyl-2-pyrrolidone copolymer (hydrophilic polymers and their use in electrochem. cells)

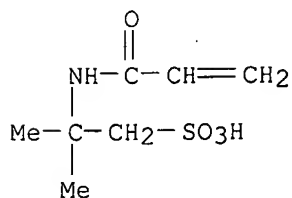
RN 502135-77-5 HCAPLUS

CN. 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

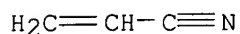
CRN 15214-89-8

CMF C7 H13 N O4 S



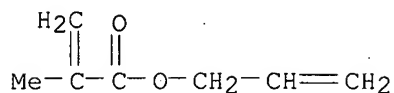
CM 2

CRN 107-13-1  
CMF C3 H3 N



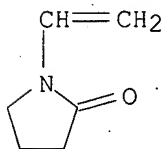
CM 3

CRN 96-05-9  
CMF C7 H10 O2



CM 4

CRN 88-12-0  
CMF C6 H9 N O



IT 502135-78-6P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-allyl methacrylate-methyl methacrylate-1-vinyl-2-pyrrolidone copolymer

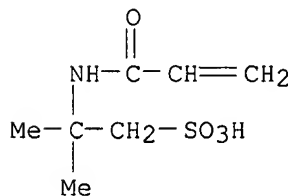
(hydrophilic polymers and their use in electrochem. cells)

RN 502135-78-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

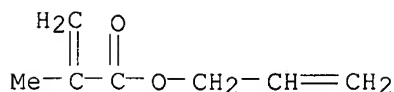
CM 1

CRN 15214-89-8  
CMF C7 H13 N O4 S



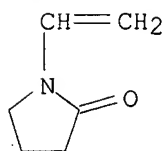
CM 2

CRN 96-05-9  
CMF C7 H10 O2



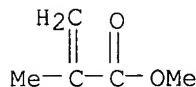
CM 3

CRN 88-12-0  
CMF C6 H9 N O



CM 4

CRN 80-62-6  
CMF C5 H8 O2



- IC ICM H01M008-10  
ICS H01B001-12; C08F026-00; C08F226-00; C25B009-02
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
Section cross-reference(s): 38, 72
- IT 502135-77-5, 2-Acrylamido-2-methyl-1-propanesulfonic acid-acrylonitrile-allyl methacrylate-1-vinyl-2-pyrrolidone copolymer (hydrophilic polymers and their use in electrochem. cells)
- IT 502135-78-6P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-allyl methacrylate-methyl methacrylate-1-vinyl-2-pyrrolidone copolymer 502135-79-7P, Acrylonitrile-allyl methacrylate-4-styrenesulfonic acid-1-vinyl-2-pyrrolidone copolymer 502135-80-0P, Acrylonitrile-allyl methacrylate-vinylbenzyltrimethylammonium chloride-1-vinyl-2-pyrrolidone copolymer 502135-81-1P, Allyl methacrylate-methyl methacrylate-4-styrenesulfonic acid-1-vinyl-2-pyrrolidone copolymer 502135-82-2P, Acrylonitrile-allyl methacrylate-1-vinyl-2-pyrrolidone-vinylsulfonic acid copolymer 502135-83-3P, Allyl methacrylate-methyl methacrylate-1-vinyl-2-pyrrolidone-vinylsulfonic acid copolymer 502135-84-4P, Acrylonitrile-allyl methacrylate-1-vinyl-2-pyrrolidone-2-sulfoethyl methacrylate copolymer 502135-85-5P, Allyl methacrylate-methyl methacrylate-1-vinyl-2-pyrrolidone-2-sulfoethyl methacrylate copolymer 502135-86-6P, Acrylonitrile-allyl methacrylate-1-vinyl-2-pyrrolidone-3-sulfopropyl methacrylate sodium salt copolymer 502135-87-7P, Allyl methacrylate-methyl methacrylate-1-vinyl-2-pyrrolidone-3-sulfopropyl



methacrylate sodium salt copolymer  
(hydrophilic polymers and their use in electrochem. cells)

L36 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:904374 HCAPLUS  
DOCUMENT NUMBER: 138:4886  
TITLE: Water-soluble polymers with water-soluble backbone  
and side units having LCST in water, process for  
their preparation, aqueous compositions containing  
them and their use in the field of cosmetics  
INVENTOR(S): L'allouret, Florence  
PATENT ASSIGNEE(S): L'oreal, Fr.  
SOURCE: Eur. Pat. Appl., 25 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1260531	A1	20021127	EP 2002-291195	20020514
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2824832	A1	20021122	FR 2001-6450	20010516
<--				
FR 2824832	B1	20050527		
CA 2386016	A1	20021116	CA 2002-2386016	20020506
<--				
US 2002198328	A1	20021226	US 2002-145142	20020515
<--				
US 6689856	B2	20040210		
JP 2003026737	A	20030129	JP 2002-141093	20020516
<--				
CN 1398905	A	20030226	CN 2002-119920	20020516
<--				
PRIORITY APPLN. INFO.:			FR 2001-6450	A 20010516
<--				

ED Entered STN: 29 Nov. 2002

AB Title polymers, useful in cosmetics, are manufactured by radical  
polymerization of

water-soluble monomers and macromers having a repeating unit with LCST of  
which the temperature of demixing by heating an aqueous solution is 5-40°  
for a 1% of this unit in water. A typical polymer was manufactured by  
radical polymerization of 84 g AMPS ammonium salt with 36 g acrylamide

derivative

of Jeffamine M2005 (ethylene oxide-propylene oxide  
copolymer 2-aminopropyl Me ether) in tert-BuOH at 60°.

IT 476490-65-0P

(water-soluble graft polymers with water-soluble backbones and side units  
having LCST in water for cosmetics)

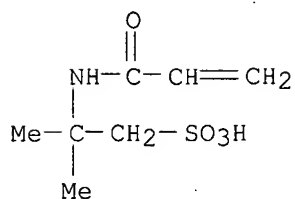
RN 476490-65-0 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-  
propanediyl ester, polymer with N-ethenylacetamide, methyloxirane,  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid  
monoammonium salt and oxirane, graft (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

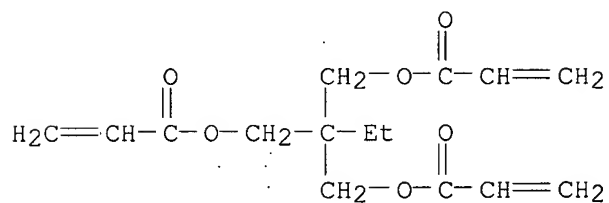
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

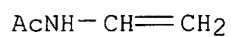
CMF C15 H20 O6



CM 3

CRN 5202-78-8

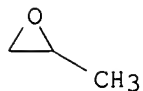
CMF C4 H7 N O



CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8

CMF C2 H4 O



IC ICM C08F290-06  
ICS C08F290-04; A61K007-48; A61K007-06  
CC 35-8 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 62  
IT 79-10-7DP, Acrylic acid, reaction products with **ethylene**  
oxide-**propylene** oxide copolymer Me aminopropyl ether  
79-41-4DP, Methacrylic acid, reaction products with  
polyisopropylacrylamide 25189-55-3DP, Poly-N-isopropylacrylamide,  
reaction products with methacrylic acid 83713-01-3DP, Jeffamine  
M2005, reaction products with acrylic acid 135808-14-9P  
(macromonomer; water-soluble graft polymers with water-soluble backbones  
and side units having LCST in water for cosmetics)  
IT 476490-64-9P 476490-65-0P 476490-66-1P 476490-67-2P  
(water-soluble graft polymers with water-soluble backbones and side units  
having LCST in water for cosmetics).  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L36 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:811999 HCAPLUS  
DOCUMENT NUMBER: 137:312108  
TITLE: Copolymers of acrylamidoalkanesulfonic acids as  
thickeners for compositions containing organic  
solvents  
INVENTOR(S): Loeffler, Matthias; Morschhaeuser, Roman; Klug,  
Peter  
PATENT ASSIGNEE(S): Clariant GmbH, Germany  
SOURCE: Eur. Pat. Appl., 15 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1251142	A1	20021023	EP 2002-8535	20020416
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10119338	A1	20021024	DE 2001-10119338	20010420
US 2003004241	A1	20030102	US 2002-123450	20020416
US 6696517	B2	20040224		
JP 2003012443	A	20030115	JP 2002-116264	20020418
PRIORITY APPLN. INFO.:			DE 2001-10119338	A 20010420

ED Entered STN: 25 Oct 2002  
AB The title copolymers are prepared from N-vinyl lactams and/or  
N-alkenylamides 1-50, acrylamidoalkanesulfonate salts 49.99-98.99, and  
crosslinking polyenes 0.01-8%. Peroxide-initiated polymerization of  
2-acrylamido-2-methylpropanesulfonic acid 80.75, N-vinylpyrrolidone  
4.10, and allyl methacrylate 0.8 g in aqueous tert-BuOH containing NH<sub>3</sub> (pH 6-7)  
at 60° gave 92.2 g copolymer (I) as a fine, white powder.  
EtOH-H<sub>2</sub>O (3:7) containing 1.0% I had viscosity at 20° and pH 5.5-6

IT 46,000 mPa-s; vs. <100 with Carbopol 980 in place of I.  
 433960-45-3P 471908-72-2P 471908-73-3P  
 471908-74-4P

(copolymers of acrylamidoalkanesulfonic acids as thickeners for  
 compns. containing organic solvents)

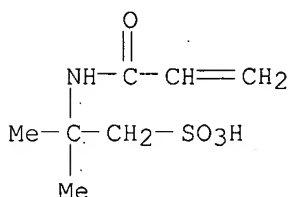
RN 433960-45-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
 propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

CMF C7 H13 N O4 S . H3 N

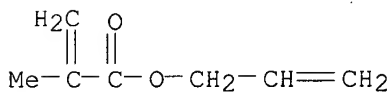


● NH<sub>3</sub>

CM 2

CRN 96-05-9

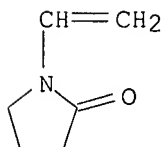
CMF C7 H10 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



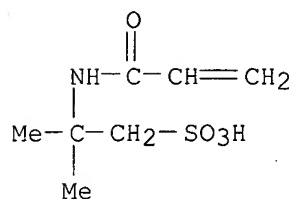
RN 471908-72-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[(2-methyl-1-oxo-2-  
 propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with  
 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
 propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

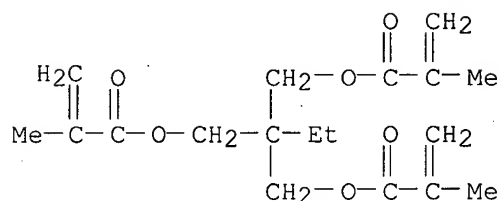
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 3290-92-4

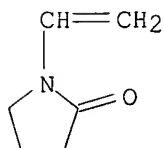
CMF C18 H26 O6



CM 3

CRN 88-12-0

CMF C6 H9 N O



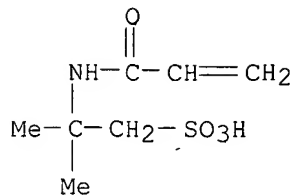
RN 471908-73-3 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

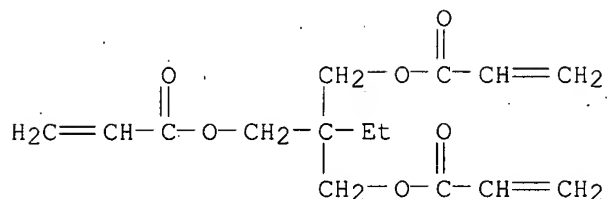
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

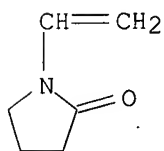
CMF C15 H20 O6



CM 3

CRN 88-12-0

CMF C6 H9 N O



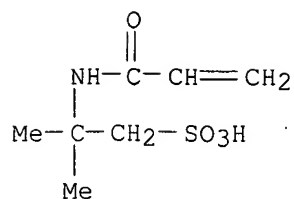
RN 471908-74-4 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with N-ethenylformamide, 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

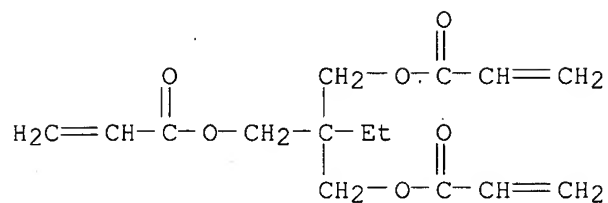
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

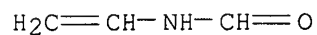
CMF C15 H20 O6



CM 3

CRN 13162-05-5

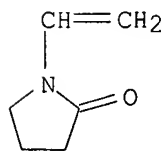
CMF C3 H5 N O



CM 4

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08F220-58  
 ICS C08F226-06; A61K007-00; A61K009-00  
 CC 38-3 (Plastics Fabrication and Uses)  
 IT 433960-45-3P 471908-72-2P 471908-73-3P  
 471908-74-4P

(copolymers of acrylamidoalkanesulfonic acids as thickeners for

comps. containing organic solvents)  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L36 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:671826 HCAPLUS  
 DOCUMENT NUMBER: 137:206181  
 TITLE: Cosmetic, dermatological or pharmaceutical  
 compositions without surfactants  
 INVENTOR(S): Loeffler, Matthias; Morschhaeuser, Roman; Hornung,  
 Michael  
 PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1236464	A2	20020904	EP 2002-4066	20020223
EP 1236464	A3	20040114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10110336	A1	20020912	DE 2001-10110336	20010303
US 2002176835	A1	20021128	US 2002-86039	20020228
US 6682750	B2	20040127		
JP 2002293717	A	20021009	JP 2002-56249	20020301
PRIORITY APPLN. INFO.:			DE 2001-10110336	A 20010303

ED Entered STN: 06 Sep 2002

AB The invention concerns surfactant-free skin preps. that contain water  
 soluble and swelling copolymers prepared from acrylamido sulfonic acids,  
 cyclic N-vinyl carboxylic acid amides and/or linear N-vinyl carboxylic  
 acid amides. The formulations contain further ingredients, e.g. oils,  
 solvents, cationic polymers, siloxanes, film-forming agents,  
 moisturizers, stabilizers, biol. active substances, glycerin. Thus a  
 copolymer was synthesized using a catalytic reaction of  
 2-acrylamido-2-methyl-propanesulfonic acid with N-vinylpyrrolidone and  
 trimethylolpropane methacrylate. A moisturizing lotion was prepared  
 that contained 1.5% of the copolymer; further ingredients were (%):  
 almond oil 7; cyclomethicone 5.00; glycerin 7.00; preservative q.s.;  
 perfume 0.30; water to 100.

IT 348635-86-9P 454450-71-6P  
 (cosmetic, dermatol. or pharmaceutical comps. without surfactants)

RN 348635-86-9 HCAPLUS

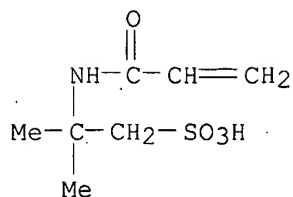
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
 propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

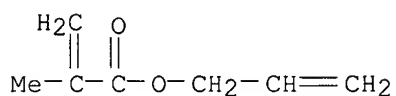




CM 2

CRN 96-05-9

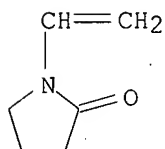
CMF C7 H10 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



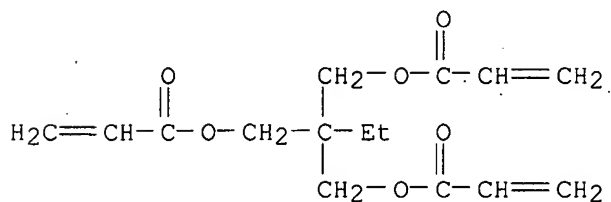
RN 454450-71-6 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with N-ethenylformamide, 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

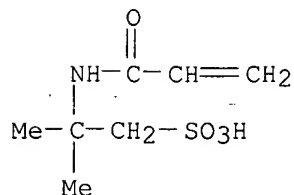
CRN 15625-89-5

CMF C15 H20 O6



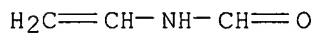
CM 2

CRN 15214-89-8  
CMF C7 H13 N O4 S



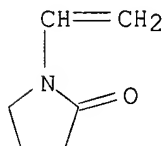
CM 3

CRN 13162-05-5  
CMF C3 H5 N O



CM 4

CRN 88-12-0  
CMF C6 H9 N O



IC ICM A61K007-48  
ICS A61K047-32  
CC 62-3 (Essential Oils and Cosmetics)  
Section cross-reference(s): 63  
IT 348635-86-9P 454450-71-6P 454461-37-1P  
(cosmetic, dermatol. or pharmaceutical compns. without surfactants)

L36 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:449734 HCAPLUS

DOCUMENT NUMBER: 137:21289

TITLE: Polymeric fluid loss additives and method of use thereof in oil wells

INVENTOR(S): Bair, Keith A.; Chen, Fu; Melbouci, Mohand; Young, Teng-Shau; Loo, De-Kai

PATENT ASSIGNEE(S): Hercules Incorporated, USA

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002046253	A2	20020613	WO 2001-US50170	20011025
WO 2002046253	A3	20030807		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6465587	B1	20021015	US 2000-732537	20001208
CA 2428096	A1	20020613	CA 2001-2428096	20011025
AU 200241704	A	20020618	AU 2002-41704	20011025
BR 2001016463	A	20031007	BR 2001-16463	20011025
EP 1358233	A2	20031105	EP 2001-988392	20011025
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EG 22967	A	20031231	EG 2001-1214	20011117
US 6590050	B1	20030708	US 2002-224525	20020820
MX 2003PA04847	A	20050214	MX 2003-PA4847	20030530
NO 2003002589	A	20030806	NO 2003-2589	20030606
PRIORITY APPLN. INFO.:			US 2000-732537	A 20001208
			WO 2001-US50170	W 20011025

ED Entered STN: 14 Jun 2002

AB A copolymer composition comprises: (A) acrylamide or a substituted acrylamide; (B) a monomer containing sulfonate functionality; (C) a substituted allyl alkylene ether compound; and, (D) a monomer containing carboxylic acid functionality. The water-soluble or water-dispersible comps. are useful in oil field applications as fluid additives for drilling and cementing processes. A fluid loss additive comprised a sodium 3-allyloxyhydroxypropanesulfonate-acrylamide-2-acrylamido-2-methylpropanesulfonic acid sodium salt-methylene bisacrylamide copolymer.

IT 435277-96-6P

(polymeric fluid loss additives and method of use thereof in oil wells)

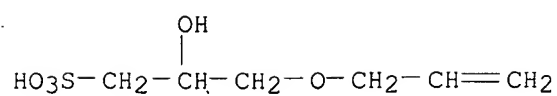
RN 435277-96-6 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 1-ethenyl-2-pyrrolidinone, 2-hydroxy-3-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 52556-42-0

CMF C6 H12 O5 S . Na

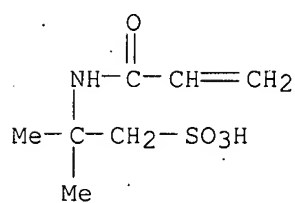


● Na

CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

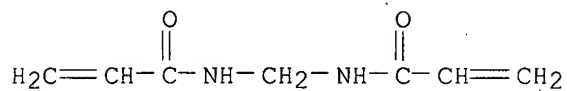


● Na

CM 3

CRN 110-26-9

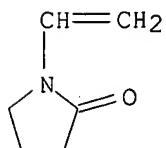
CMF C7 H10 N2 O2



CM 4

CRN 88-12-0

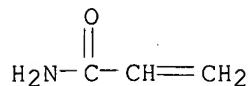
CMF C6 H9 N O



CM 5

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F220-54  
 ICS C08F220-58; C08F220-06; C08F216-14; C09K007-00  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 51  
 IT 435277-94-4P 435277-96-6P 435277-97-7P  
 (polymeric fluid loss additives and method of use thereof in oil wells)

L36 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:428984 HCAPLUS  
 DOCUMENT NUMBER: 137:21015  
 TITLE: Acryloyldimethyltaurine acid-based grafted copolymers  
 INVENTOR(S): Morschhaeuser, Roman; Loeffler, Matthias  
 PATENT ASSIGNEE(S): Clariant Gmbh, Germany  
 SOURCE: PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 16  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044269	A1	20020606	WO 2001-EP13857	20011128
W: BR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10059832	A1	20020613	DE 2000-10059832	20001201
JP 2002201242	A	20020719	JP 2001-296000	20010927
EP 1339791	A1	20030903	EP 2001-998591	20011128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001015765	A	20030916	BR 2001-15765	20011128
US 2004097657	A1	20040520	US 2003-433199	20031110
US 7151137	B2	20061219		
PRIORITY APPLN. INFO.:			DE 2000-10059832	A 20001201
			WO 2001-EP13857	W 20011128

ED Entered STN: 07 Jun 2002

AB The invention relates to water-soluble or water-swellaable copolymers which can be obtained by radical copolymn. of (A) acryloyldimethyltaurine acid and/or acryloyldimethyltaurates and (B) optionally, one or more addnl. olefinically unsatd., optionally crosslinking comonomers having at least one oxygen, nitrogen, sulfur or phosphorus atom and having a mol. weight of less than 500 g/mol, the copolymn. being carried out in the presence of at least one polymeric additive with a number average mol. weight of 200 g/mol to 109 g/mol. A typical polymer was manufactured by radical polymerization of 80 g

AMPS

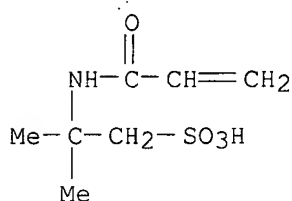
ammonium salt with 1.8 g TMPTA in the presence of 5 g

poly-N-vinylpyrrolidone.  
 IT 288155-97-5DP, Ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-TMPTA-N-vinylformamide copolymer, reaction products with acrylic acid-vinylcaprolactam copolymer 433960-45-3DP, Allyl methacrylate-ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-N-vinyl-2-pyrrolidone copolymer, reaction products with polyvinylpyrrolidone  
 (acryloyldimethyltaurine acid-based grafted copolymers)  
 RN 288155-97-5 HCAPLUS  
 CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with N-ethenylformamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

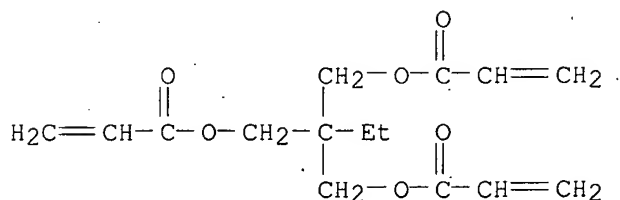
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 15625-89-5

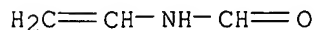
CMF C15 H20 O6



CM 3

CRN 13162-05-5

CMF C3 H5 N O



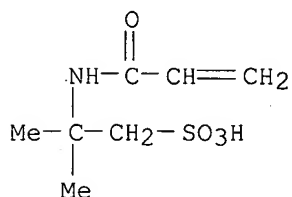
RN 433960-45-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

CMF C7 H13 N O4 S . H3 N

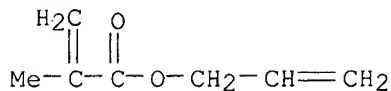


● NH<sub>3</sub>

CM 2

CRN 96-05-9

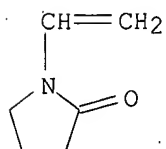
CMF C7 H10 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08L051-00

ICS C08F291-00; C08F265-04; C08F271-02

CC 37-3 (Plastics Manufacture and Processing)

IT 9003-01-4DP, Polyacrylic acid, reaction products with acryloyldimethyltaurate-based copolymers 9003-05-8DP, Polyacrylamide, reaction products with acryloyldimethyltaurate-based copolymers 9003-39-8DP, Poly-N-vinylpyrrolidone, reaction products with AMPS ammonium salt-TMPTA copolymer 25087-26-7DP, Polymethacrylic acid, reaction products with acryloyldimethyltaurate-based copolymers 25322-68-3DP, Polyethylene glycol, reaction products with acryloyldimethyltaurate-based copolymers 25322-69-4DP,

Polypropylene glycol, reaction products with acryloyldimethyltaurate-based copolymers 26062-79-3DP, Polydiallyldimethylammonium chloride, reaction products with acryloyldimethyltaurate-based copolymers 26161-33-1DP, Poly-2-methacryloyloxyethyltrimethylammonium chloride, reaction products with acryloyldimethyltaurate-based copolymers 26616-03-5DP, Poly-N-vinyl-N-methylacetamide, reaction products with acryloyldimethyltaurate-based copolymers 28062-44-4DP, Acrylic acid-N-vinyl-2-pyrrolidone copolymer, reaction products with AMPS-vinyl acetate copolymer 28408-65-3DP, Poly-N-vinylacetamide, reaction products with acryloyldimethyltaurate-based copolymers 31851-82-8DP, Poly-N-vinylmorpholine, reaction products with acryloyldimethyltaurate-based copolymers 50885-97-7DP, Polyhydroxymethyl methacrylate, reaction products with acryloyldimethyltaurate-based copolymers 64112-05-6DP, AMPS-vinyl acetate copolymer, reaction products with acrylic acid-vinylpyrrolidone copolymer 72018-12-3DP, Poly-N-vinylformamide, reaction products with AMPS ammonium salt-TMPTA copolymer 102583-40-4DP, Acrylic acid-N-vinylcaprolactam copolymer, reaction products with AMPS ammonium salt-vinylformamide-TMPTA copolymer 202000-47-3DP, Ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-TMPTA copolymer, reaction products with polyvinylpyrrolidone 288155-97-5DP, Ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-TMPTA-N-vinylformamide copolymer, reaction products with acrylic acid-vinylcaprolactam copolymer 433960-45-3DP, Allyl methacrylate-ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-N-vinyl-2-pyrrolidone copolymer, reaction products with polyvinylpyrrolidone

(acryloyldimethyltaurine acid-based grafted copolymers)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:428954 HCAPLUS

DOCUMENT NUMBER: 137:21790

TITLE: Compositions containing copolymers based on acryloylaminodimethylethanesulfonic acid and synergistic additives

INVENTOR(S): Morschhaeuser, Roman; Kayser, Christoph; Loeffler, Matthias; Heier, Karl Heinz; Tardi, Aranka; Schade, Manfred; Botthof, Gernold

PATENT ASSIGNEE(S): Clariant Gmbh, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044230	A2	20020606	WO 2001-EP13859	20011128
WO 2002044230	A3	20021031		
W: BR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10059818	A1	20020613	DE 2000-10059818	20001201
DE 10059819	A1	20020613	DE 2000-10059819	20001201
DE 10059821	A1	20020613	DE 2000-10059821	20001201



DE 10059822	A1	20020613	DE 2000-10059822	20001201
DE 10059823	A1	20020613	DE 2000-10059823	20001201
DE 10059824	A1	20020613	DE 2000-10059824	20001201
DE 10059825	A1	20020613	DE 2000-10059825	20001201
DE 10059826	A1	20020613	DE 2000-10059826	20001201
DE 10059828	A1	20020613	DE 2000-10059828	20001201
DE 10059829	A1	20020613	DE 2000-10059829	20001201
DE 10059830	A1	20020613	DE 2000-10059830	20001201
DE 10059831	A1	20020613	DE 2000-10059831	20001201
DE 10059832	A1	20020613	DE 2000-10059832	20001201
DE 10059833	A1	20020613	DE 2000-10059833	20001201
DE 10059827	A1	20020620	DE 2000-10059827	20001201
DE 10127876	A1	20021212	DE 2001-10127876	20010611
JP 2002327102	A	20021115	JP 2001-296004	20010927
BR 2001015764	A	20030916	BR 2001-15764	20011128
EP 1354001	A2	20031022	EP 2001-998569	20011128

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, FI, CY, TR

US 2004109838	A1	20040610	US 2003-433119	20031124
US 7053146	B2	20060530		

PRIORITY APPLN. INFO.:

DE 2000-10059818	A	20001201
DE 2000-10059819	A	20001201
DE 2000-10059821	A	20001201
DE 2000-10059822	A	20001201
DE 2000-10059823	A	20001201
DE 2000-10059824	A	20001201
DE 2000-10059825	A	20001201
DE 2000-10059826	A	20001201
DE 2000-10059827	A	20001201
DE 2000-10059828	A	20001201
DE 2000-10059829	A	20001201
DE 2000-10059830	A	20001201
DE 2000-10059831	A	20001201
DE 2000-10059832	A	20001201
DE 2000-10059833	A	20001201
DE 2001-10127876	A	20010611
WO 2001-EP13859	W	20011128

ED Entered STN: 07 Jun 2002

AB The invention relates to compns. containing copolymers based on acryloylaminodimethylethanesulfonic acid or its salts, in addition to synergistic additives, selected from anionic, cationic, nonionic and/or betaine surfactants. Said compns. are characterized by a distinctive thermoassociative behavior and are particularly suitable

as thickeners.

IT 434337-19-6P

(comps. containing copolymers based on acryloylaminodimethylethanesulfonic acid or its salts and synergistic surfactant additives for thickeners)

RN 434337-19-6 HCAPLUS

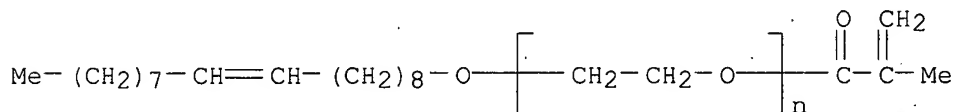
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-ethenylformamide and [α-(2Z)-2-methyl-1-oxo-2-propenyl]-ω-(9-octadecenyloxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 176110-19-3

CMF (C2 H4 O)<sub>n</sub> C22 H40 O2

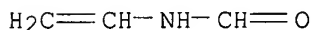
CCI PMS



CM 2

CRN 13162-05-5

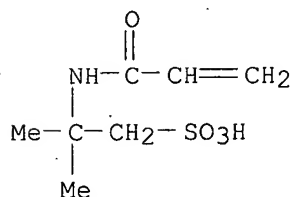
CMF C3 H5 N O



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM C08F291-00

CC 46-4 (Surface Active Agents and Detergents)

IT 79-41-4DP, Methacrylic acid, esters with polyoxyalkylene, polymers with TMPTA and AMPS ammonium salt 88-12-ODP, polymers with polyoxyalkylene methacrylates, AMPS ammonium salt, and methacryloyloxyethyltrimethylammonium chloride, reaction products with

polyvinylpyrrolidone 5039-78-1DP, Methacryloyloxyethyltrimethylammonium chloride, polymers with AMPS ammonium salt, polyethylene glycol monocrotonate C12-14-alkyl ethers and diallyldimethylammonium chloride, reaction products with acrylic acid-vinylformamide copolymer 5039-78-1DP, 2-Methacryloyloxyethyltrimethylammonium chloride, polymers with polyoxyalkylene methacrylates, AMPS ammonium salt, and vinylpyrrolidone, reaction products with polyvinylpyrrolidone 7398-69-8DP, Diallyldimethylammonium chloride, polymers with AMPS ammonium salt, polyethylene glycol monocrotonate C12-14-alkyl ethers and methacryloyloxyethyltrimethylammonium chloride, reaction products with acrylic acid-vinylformamide copolymer 7664-93-9DP, Sulfuric acid, esters with fatty alcs., salts 9002-92-0P, Polyethylene glycol lauryl ether 9003-01-4DP, Polyacrylic acid, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 9003-05-8DP, Polyacrylamide, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 9003-39-8DP, K-30, reaction products with copolymers of acryloylaminodimethylethanesulfonate salts 9004-77-7P, Polyethylene glycol butyl ether 15214-89-8DP, AMPS, polymers with polyoxyalkylene (meth)acrylates and methacrylamidoethyltrimethylammonium chloride 15625-89-5DP, TMPTA, polymers with polyoxyalkylene methacrylates and AMPS ammonium salt 25087-26-7DP, Polymethacrylic acid, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 25189-83-7DP, Poly-N-vinylcaprolactam, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 25322-68-3DP, Polyethylene glycol, alkyl ethers, methacrylates, polymers with TMPTA and AMPS ammonium salts 25322-69-4DP, Polypropylene glycol, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 25736-86-1DP, Polyethylene glycol monomethacrylate, C12-14-alkyl ethers, polymers with polyoxyalkylene acrylates, methacrylamidoethyltrimethylammonium chloride, and AMPS 25852-47-5DP, Polyethylene glycol dimethacrylate, polymers with AMPS ammonium salt, ethoxylated polysiloxane methacrylate, and polyoxyalkylene acrylate 26062-79-3DP, Polydiallyldimethylammonium chloride, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 26161-33-1DP, Poly-2-methacryloyloxyethyltrimethylammonium chloride, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 26616-03-5DP, Poly-N-vinyl-N-methylacetamide, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 28408-65-3DP, Poly-N-vinylacetamide, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 31851-82-8DP, Poly-N-vinylmorpholine, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 50885-97-7DP, Polyhydroxymethyl methacrylate, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 58374-69-9DP, polymers with polyoxyalkylene methacrylates and TMPTA 72018-12-3DP, Poly-N-vinylformamide, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 134367-40-1DP, Acrylic acid-N-vinylformamide copolymer, reaction products with acryloylaminodimethylethanesulfonate-based copolymers 434337-19-6P 434337-20-9P 434938-17-7P 435278-89-0P (comps. containing copolymers based on acryloylaminodimethylethanesulfonic acid or its salts and synergistic surfactant additives for thickeners)

L36 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:428949 HCAPLUS

DOCUMENT NUMBER: 137:20779

TITLE: Silicon-containing comb polymers based on acryloyldimethyltaurine acid

INVENTOR(S): Morschhaeuser, Roman; Glauder, Jan; Loeffler, Matthias; Rudloff, Susan; Klein, Sonja  
 PATENT ASSIGNEE(S): Clariant Gmbh, Germany  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 16  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044225	A2	20020606	WO 2001-EP13858	20011128
WO 2002044225	A3	20030410		
W: BR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10059831	A1	20020613	DE 2000-10059831	20001201
JP 2002201234	A	20020719	JP 2001-295999	20010927
EP 1339764	A2	20030903	EP 2001-985828	20011128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001015813	A	20030916	BR 2001-15813	20011128
US 2005232887	A1	20051020	US 2003-433118	20031117
US 7186774	B2	20070306		
PRIORITY APPLN. INFO.:			DE 2000-10059831	A 20001201
			WO 2001-EP13858	W 20011128

ED Entered STN: 07 Jun 2002

AB The invention relates to water-soluble or water-swellaable copolymers, which are obtained by radically copolymerizing: (A) acryloyldimethyltaurine acid and/or acryloyldimethyltaurates, (B) optionally one or more olefinically unsatd., optionally crosslinking comonomers, which contain at least one oxygen atom, nitrogen atom, sulfur atom or phosphorous atom and which have a mol. weight of less than 500 g/mol, and (C) one or more at least monofunctional silicon-containing constituents, which are capable of radical polymerization, whereby the copolymerization is optionally performed in the presence of at least one polymeric additive having average mol. wts. ranging from 200 g/mol to 109 g/mol. A typical polymer is manufactured by radical polymerization of NH<sub>4</sub> acryloyldimethyltaurate 80 and GP 501 (vinyl dimethoxy-terminated dimethicone) 20 g in presence of 5 g K-15 (poly-N-vinylpyrrolidone).

IT 435277-91-1P

(silicon-containing water-soluble or water-swellaable polymers based on acryloyldimethyltaurine acid or its salts)

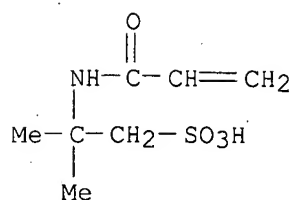
RN 435277-91-1 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monoammonium salt, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

CMF C7 H13 N O4 S . H3 N

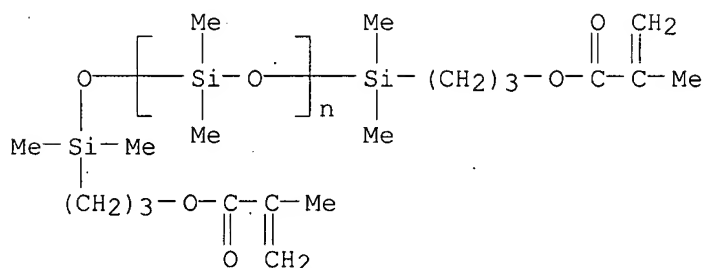
● NH<sub>3</sub>

CM 2

CRN 58130-03-3

CMF (C2 H6 O Si)<sub>n</sub> C18 H34 O5 Si2

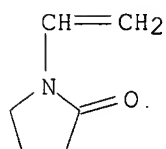
CCI PMS



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08F020-58

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 79-41-4DP, Methacrylic acid, esters with ethoxylated polysiloxanes, polymers with ammonium acryloyldimethyltaurate 5165-97-9DP, Sodium 2-acrylamido-2-methyl-1-propanesulfonate, polymers with ethoxylated polysiloxane methacrylate, trimethylolpropane triacrylate, reaction products with polyvinylformamide 9003-39-8DP, Poly-N-vinylpyrrolidone, reaction products with silicon-containing acryloyldimethyltaurate-based polymers 15625-89-5DP, TMPTA, polymers with ethoxylated polysiloxane methacrylate, AMPS Na salt, reaction products with polyvinylformamide 72018-12-3DP, Poly-N-vinylformamide, reaction products with ethoxylated polysiloxane .

methacrylate-AMPS Na salt copolymers 435277-90-ODP, reaction  
products with polyvinylpyrrolidone 435277-91-1P  
435277-92-2P

(silicon-containing water-soluble or water-swellaable polymers based on  
acryloyldimethyltaurine acid or its salts)

L36 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:428948 HCAPLUS

DOCUMENT NUMBER: 137:20778

TITLE: Water-soluble and water-swellaable copolymers based  
on acryloyldimethyltaurine acid

INVENTOR(S): Morschhaeuser, Roman; Glauder, Jan; Loeffler,  
Matthias; Kayser, Christoph; Tardi, Aranka

PATENT ASSIGNEE(S): Clariant Gmbh, Germany

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044224	A2	20020606	WO 2001-EP13854	20011128
			<--	
WO 2002044224	A3	20030912		
W: BR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,				
NL, PT, SE, TR				
DE 10059828	A1	20020613	DE 2000-10059828	20001201
			<--	
JP 2002201239	A	20020719	JP 2001-296003	20010927
			<--	
EP 1363956	A2	20031126	EP 2001-991763	20011128
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
PT, IE, FI, CY, TR				
BR 2001015815	A	20040127	BR 2001-15815	20011128
			<--	
US 2004167304	A1	20040826	US 2003-433179	20031110
			<--	
US 6891011	B2	20050510		
PRIORITY APPLN. INFO.:			DE 2000-10059828	A 20001201
			<--	
			WO 2001-EP13854	W 20011128
			<--	

ED Entered STN: 07 Jun 2002

AB The invention relates to water-soluble or water-swellaable copolymers,  
which are obtained by radically copolymerizing: (A) acryloyldimethyltaurine  
acid and/or acryloyldimethyltaurates, (B) optionally, one or more  
addnl. olefinically unsatd., non-cationic comonomers, (C)  
optionally, one or more olefinically unsatd., cationic  
comonomers, (D) optionally, one or more silicon-containing constituent(s),  
(E) optionally one or more fluorine-containing constituent(s), (F)  
optionally one or more macromonomers, (G) optionally, at least one  
polymeric additive, with the provision that constituent (A) is  
copolymerized with at least two constituents selected from at least two of  
groups (C) to (F). A typical copolymer was manufactured by radical  
polymerization

of AMPS NH4 salt 80, Genapol LA-070 methacrylate 10, Silvet 7608

(monofunctional ethoxylated siloxane methacrylate) 10, and TMPTA 1.8 g.

IT 434286-59-6DP, reaction products with poly-N-vinylformamide (water-soluble and water-swellaable copolymers based on acryloyldimethyltaurine acid or its salts)

RN 434286-59-6 HCAPLUS

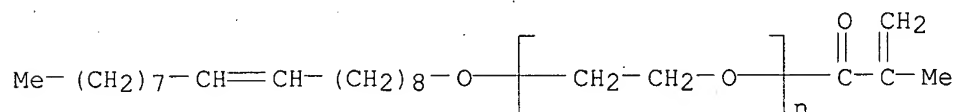
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N-ethenylformamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and  $\alpha$ -[(2Z)-2-methyl-1-oxo-2-propenyl]- $\omega$ -(9-octadecenyl)oxy)poly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 176110-19-3

CMF (C2 H4 O)<sub>n</sub> C22 H40 O2

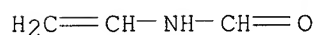
CCI PMS



CM 2

CRN 13162-05-5

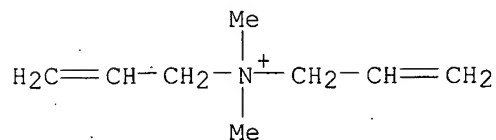
CMF C3 H5 N O



CM 3

CRN 7398-69-8

CMF C8 H16 N . Cl

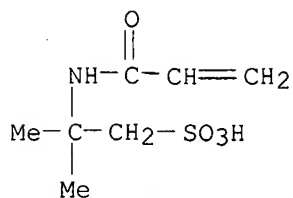


● Cl<sup>-</sup>

CM 4

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM C08F020-58  
 CC 35-4. (Chemistry of Synthetic High Polymers)  
 IT Alcohols, preparation  
     (tallow, ethers, with graft polymers of **ethylene** oxide  
     and acryloyldimethyltaurates; water-soluble and water-swella-  
     ble copolymers based on acryloyldimethyltaurine acid or its salts)  
 IT 79-06-1DP, Acrylamide, copolymers with acryloyldimethyltaurates  
 79-10-7DP, Acrylic acid, esters with ethoxylated tallow alcs.,  
 polymers with acryloyldimethyltaurates, reaction products with  
 polyvinylcaprolactam 88-12-0DP, N-Vinyl-2-pyrrolidone, copolymers  
 with acryloyldimethyltaurates 3724-65-0DP, Crotonic acid, esters  
 with polyethylene glycol tallow ethers, polymers with  
 acryloyldimethyltaurates, reaction products with acrylic  
 acid-vinylformamide copolymers 9003-39-8DP, K-30, reaction products  
 with acryloyldimethyltaurate salt polymers 9056-77-3DP, Polyethylene  
 glycol methacrylate, copolymers with acryloyldimethyltaurates,  
 reaction products with acrylic acid-vinylcaprolactam copolymers  
 15625-89-5DP, TMPTA, comb copolymers with acryloyldimethyltaurates  
 25189-83-7DP, Poly-N-vinylcaprolactam, reaction products with  
 copolymers of acryloyldimethyltaurates 25852-47-5DP, Polyethylene  
 glycol dimethacrylate, copolymers with acryloyldimethyltaurates,  
 reaction products with polyvinylcaprolactam 45708-78-9DP, copolymers  
 with acryloyldimethyltaurates, reaction products with  
 polyvinylcaprolactam 72018-12-3DP, Poly-N-vinylformamide, reaction  
 products with acryloyldimethyltaurate-based polymers 102583-40-4DP,  
 Acrylic acid-N-vinylcaprolactam copolymer, reaction products with  
 acryloyldimethyltaurate-based polymers 134367-40-1DP, Acrylic  
 acid-N-vinylformamide copolymer, reaction products with copolymers of  
 acryloyldimethyltaurates 434286-57-4DP, Ammonium  
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate-  
**ethylene** oxide-2-(methacryloyloxy)ethyltrimethylammonium  
 chloride-N-vinyl-2-pyrrolidone graft copolymer, ethers with tallow  
 alcs., reaction products with polyvinylpyrrolidone 434286-58-5DP,  
 copolymers with acryloyldimethyltaurates, reaction products with  
 acrylic acid-vinylcaprolactam copolymers 434286-59-6DP,  
 reaction products with poly-N-vinylformamide 434286-60-9DP,  
 copolymers with acryloyldimethyltaurates, reaction products with  
 polyvinylcaprolactam 435278-26-5DP, ethers with tallow alcs.  
 (water-soluble and water-swella-ble copolymers based on  
 acryloyldimethyltaurine acid or its salts)

L36 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:428673 HCAPLUS  
 DOCUMENT NUMBER: 137:24139  
 TITLE: Deodorants and antiperspirants  
 INVENTOR(S): Loeffler, Matthias; Morschhaeuser, Roman  
 PATENT ASSIGNEE(S): Clariant Gmbh, Germany



SOURCE: PCT Int. Appl., 44 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 16  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002043687	A2	20020606	WO 2001-EP13863	20011128
			<--	
WO 2002043687	A3	20040415		
W: BR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,				
NL, PT, SE, TR				
DE 10059823	A1	20020613	DE 2000-10059823	20001201
			<--	
JP 2002205931	A	20020723	JP 2001-295994	20010927
			<--	
BR 2001015844	A	20031230	BR 2001-15844	20011128
			<--	
EP 1432746	A2	20040630	EP 2001-989525	20011128
			<--	
EP 1432746	B1	20070207		
R: DE, ES, FR, GB, IT				
US 2004096409	A1	20040520	US 2003-433113	20031117
			<--	
US 7186405	B2	20070306		
PRIORITY APPLN. INFO.:			DE 2000-10059823	A 20001201
			<--	
			WO 2001-EP13863	W 20011128
			<--	

ED Entered STN: 07 Jun 2002

AB The invention relates to deodorants and anti-perspirants containing at least one copolymer, which can be obtained by radical copolymn. of: A) acryloyldimethyltaurine acid and/or acryloyldimethyltaurates, B) optionally, one or more addnl. olefinically unsatd., non-cationic comonomers, C) optionally, one or more olefinically unsatd., cationic comonomers, D) optionally, one or more components containing silicon, E) optionally, one or more components containing fluorine and F) optionally, one or more macromonomers, G) the copolymn. taking place in the presence of at least one polymeric additive, H) provided that component A) is copolymd. with at least one component selected from one of the groups D) to G).

IT 433925-67-8

(formulation of deodorants and antiperspirants)

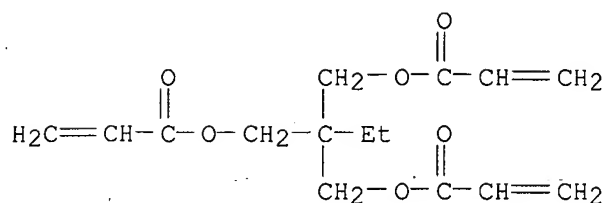
RN 433925-67-8 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5

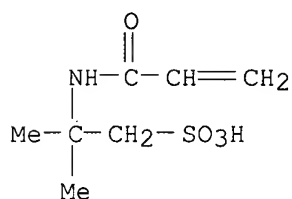
CMF C15 H20 O6



CM 2

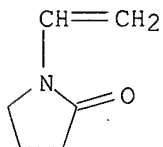
CRN 15214-89-8

CMF C7 H13 N O4 S



CM 3

CRN 88-12-0

CMFC6H9NO

IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

IT 56-81-5, Glycerol, biological studies 75-21-8, **Ethylene**  
oxide, biological studies 75-56-9, **Propylene** oxide,  
biological studies 79-06-1, Acrylamide, biological studies  
79-06-1D, Acrylamide, polymers with siloxanes and unsatd. monomers  
79-10-7, Acrylic acid, biological studies 79-41-4, Methacrylic acid,  
biological studies 88-12-0, biological studies 88-12-0D, polymers  
with siloxanes and unsatd. monomers 2148-30-3 2235-00-9,  
N-Vinylcaprolactam 2867-47-2D, copolymers 3195-78-6 5039-78-1D,  
copolymers 5202-78-8, N-Vinylacetamide 7398-69-8,  
Diallyldimethylammonium chloride 7398-69-8D, copolymers  
9006-65-9D, Dimethicone, methacryloxypropyl derivs., polymers with  
unsatd. monomers 13162-05-5, N-Vinylformamide 15214-89-8D,  
polymers with siloxanes and unsatd. monomers 15625-89-5D, polymers  
with siloxanes and unsatd. monomers 20602-77-1D, copolymers  
21982-30-9, Hydroxymethylmethacrylate 44992-01-0D, copolymers  
45708-78-9D, copolymers 48103-10-2D, copolymers 51410-72-1, Maptac  
59126-40-8D, copolymers 62723-61-9D, copolymers 69174-85-2D,  
copolymers 72018-12-3D, polymers with siloxanes and unsatd. monomers

74443-97-3D, copolymers 190735-24-1D, Fluowet ac 812, polymers with  
siloxanes and unsatd. monomers 201338-09-2 433925-65-6  
433925-66-7 433925-67-8  
(formulation of deodorants and antiperspirants)

L36 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:598260 HCAPLUS

DOCUMENT NUMBER: 135:167177

TITLE: Synthetic crosslinked copolymer solutions and  
direct injection to subterranean oil and gas  
formations

INVENTOR(S): Patterson, Daniel Bruce

PATENT ASSIGNEE(S): Clariant International Ltd., Switz.; Clariant  
Finance (Bvi) Ltd.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001059254	A1	20010816	WO 2001-IB512	20010212
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6465397	B1	20021015	US 2000-502637	20000211
EP 1257726	A1	20021120	EP 2001-951157	20010212
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
NO 2002003384	A	20020930	NO 2002-3384	20020712
NO 322946	B1	20061218		
PRIORITY APPLN. INFO.:			US 2000-502637	A 20000211
			WO 2001-IB512	W 20010212

ED Entered STN: 17 Aug 2001

AB Water-soluble copolymers useful in modifying the water permeability of subterranean hydrocarbon formations were prepared from N-substituted  $\alpha,\beta$ -unsatd. carboxylamide and sulfonated vinyl monomers. The copolymers are in the form of dilute, pumpable, homogeneous, aqueous solns. and comprise a crosslinked copolymer with intramol. and intermol. crosslinking in a non-gelled state and a mol. size/shape corresponding to a K-value of 220-450. Thus, AMPS 7.5 g, 27.5 g 505 aqueous acrylamide, and 3.75 g N-vinyl formamide were polymerized in the presence of EDTA and 2,2'-azobis(2-amidinopropane) dihydrate to give a copolymer with K-value 243.

IT 354580-85-1P

(preparation of crosslinked acrylamide copolymer solns. for modification of water permeability of subterranean oil and gas formations)

RN 354580-85-1 HCAPLUS

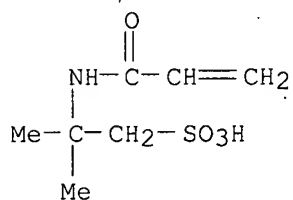
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
N-ethenylformamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-

propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

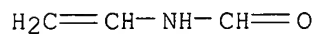
CMF C7 H13 N O4 S



CM 2

CRN 13162-05-5

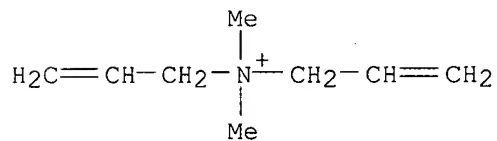
CMF C3 H5 N O



CM 3

CRN 7398-69-8

CMF C8 H16 N . Cl

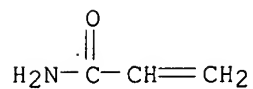


● Cl<sup>-</sup>

CM 4

CRN 79-06-1

CMF C3 H5 N O



IC ICM E21B033-138

ICS E21B043-02; C08F226-04; C08F220-58; C08F230-02

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 82199-14-2P 300852-83-9P 354580-85-1P

(preparation of crosslinked acrylamide copolymer solns. for modification of water permeability of subterranean oil and gas formations)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:505353 HCAPLUS

DOCUMENT NUMBER: 135:93031

TITLE: Water-soluble or -swellable crosslinked copolymers as thickeners

INVENTOR(S): Loeffler, Matthias; Morschhaeuser, Roman

PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10000648	A1	20010712	DE 2000-10000648	20000111
EP 1116733	A1	20010718	EP 2000-710047	20001229
EP 1116733	B1	20030423		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2001000046	A	20010821	BR 2001-46	20010110
JP 2001240626	A	20010904	JP 2001-2956	20010110
US 2001029287	A1	20011011	US 2001-760317	20010111
US 6437068	B2	20020820		
US 2002193544	A1	20021219	US 2002-177704	20020621
US 6683144	B2	20040127		
US 2004063886	A1	20040401	US 2003-672976	20030926
US 6891009	B2	20050510		
US 2005165188	A1	20050728	US 2005-82333	20050317
US 7208556	B2	20070424		
PRIORITY APPLN. INFO.:			DE 2000-10000648	A 20000111
			US 2001-760317	A3 20010111
			US 2002-177704	A1 20020621
			US 2003-672976	A1 20030926

ED Entered STN: 13 Jul 2001

AB The title polymers, useful as thickeners in pharmaceuticals and cosmetics, contain N-vinyl lactams, and optionally N-alkenyl amides, 1-50; N-alkenyl- $\omega$ -sulfoalkanamides 1-50; and crosslinking monomers containing  $\geq 2$  double bonds 0.01-8%. Peroxide-initiated polymerization of 80.75 g 2-acrylamido-2-methyl-1-propanesulfonic acid, 4.10 g N-vinylpyrrolidone, and 0.8 g allyl methacrylate in aqueous tert-BuOH in the presence of NH<sub>3</sub> at pH 6-7 and 60-70° gave 92.2 g copolymer, a 1% aqueous gel of which had viscosity 65.6 and 52.1 Pa-s at pH 6-7 and .apprx.3, resp. Cosmetic formulations containing these polymers are described.

IT 348635-86-9P

(water-soluble or -swellable crosslinked copolymers as thickeners)

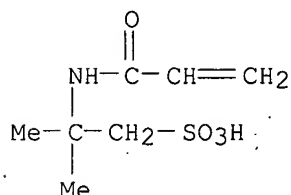
RN 348635-86-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

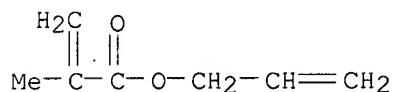
CMF C7 H13 N O4 S



CM 2

CRN 96-05-9

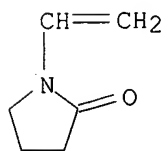
CMF C7 H10 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08F226-06

ICS C08F271-02; C08F226-02; C08F220-58; A61K007-48; A61K009-107

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 62, 63

IT 348635-86-9P

(water-soluble or -swellable crosslinked copolymers as thickeners)

L36 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:290953 HCAPLUS

DOCUMENT NUMBER: 134:315903

TITLE: Water-soluble thickener for cosmetic compositions

INVENTOR(S): Kaneda, Isamu; Miyazawa, Kazuyuki; Hariki, Toshio

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001115135	A	20010424	JP 1999-292563	19991014
JP 3695254	B2	20050914		
JP 2005200431	A	20050728	JP 2005-108166	20050405
PRIORITY APPLN. INFO.:			JP 1999-292563	A3 19991014

ED Entered STN: 25 Apr 2001

AB The invention relates to a water-soluble thickener suitable for use in a cosmetic composition providing improved use feel, wherein the thickener consists of a copolymer containing 2-acrylamide-2-methylpropane sulfonate, hydroxyethyl methacrylate and/or vinylpyrrolidone, and crosslinkable monomer. A thickener consisting of 2-acrylamide-2-methylpropane sulfonate-hydroxyethyl methacrylate-N,N'-methylene bisacrylamide copolymer was prepared, and combined with other ingredients at 0.1 % to obtain a skin-whitening lotion.

IT **335157-63-6P**

(water-soluble thickener for cosmetic compns.)

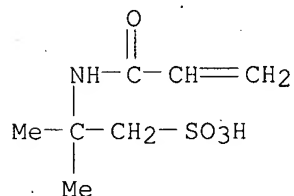
RN 335157-63-6 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone and N,N'-methylenebis[2-propenamide] (CA INDEX NAME)

CM 1

CRN 15214-89-8

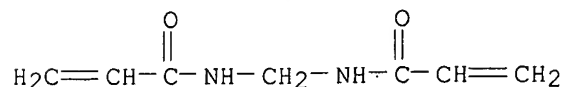
CMF C7 H13 N O4 S



CM 2

CRN 110-26-9

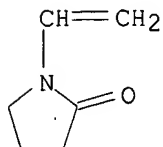
CMF C7 H10 N2 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C09K003-00  
 ICS A61K007-00; A61K007-48; A61K007-13; C08F220-28; C08F220-56;  
 C08F226-08  
 CC 62-4 (Essential Oils and Cosmetics)  
 IT 85824-38-OP 335157-63-6P  
 (water-soluble thickener for cosmetic compns.)

L36 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2000:573549 HCAPLUS  
 DOCUMENT NUMBER: 133:164492  
 TITLE: Water-soluble or swellable polymers for use in cosmetics  
 INVENTOR(S): Brungs, Peter; Loffler, Matthias  
 PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1028129	A1	20000816	EP 2000-101919	20000201
EP 1028129	B1	20050427		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19905639	A1	20000817	DE 1999-19905639	19990211
JP 2000234003	A	20000829	JP 2000-33711	20000210
US 6355752	B1	20020312	US 2000-501904	20000210
US 2002082373	A1	20020627	US 2001-27043	20011220
US 6506833	B2	20030114		
PRIORITY APPLN. INFO.:			DE 1999-19905639	A 19990211
			US 2000-501904	A3 20000210

ED Entered STN: 18 Aug 2000

AB The title polymers, which can be prepared in cosmetically acceptable solvents, comprise 1-50% repeating units -CH<sub>2</sub>CH[N(R<sub>1</sub>)COR<sub>2</sub>]-, 49.99-98.99% repeating units -CH<sub>2</sub>C(R<sub>3</sub>)(CONHZSO<sub>3</sub>NH<sub>4</sub>)- (R<sub>1</sub>-3 = H or Me, Z = C<sub>1</sub>-4 alkylene), and 0.01-5% crosslinking polyene. Peroxide-initiated polymerization of 2-acrylamido-2-methyl-1-propanesulfonic acid 80.75, N-vinylformamide 4.25, and trimethylolpropane triacrylate 1.45 g in aqueous tert-BuOH containing 6.64 g NH<sub>3</sub> at 60-70° gave 92.2 g fine, white copolymer with viscosity of a 1% aqueous gel 64.2 and 50.2 Pa-s at pH 6-7 and .apprx.3, resp. Use of the polymers in cosmetic formulations is exemplified.

IT 288155-97-5P 288155-98-6P  
 (water-soluble or swellable polymers for use in cosmetics)

RN 288155-97-5 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-

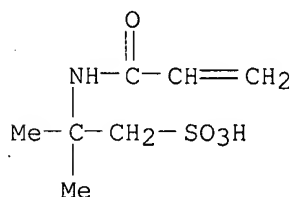


propanediyl ester, polymer with N-ethenylformamide and  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid  
monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

CMF C7 H13 N O4 S . H3 N

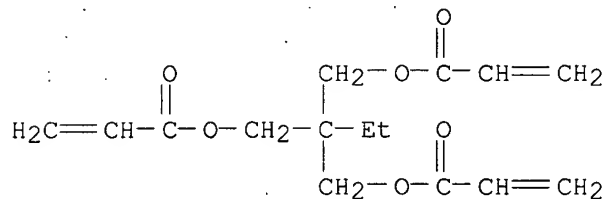


● NH<sub>3</sub>

CM 2

CRN 15625-89-5

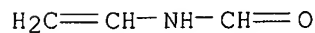
CMF C15 H20 O6



CM 3

CRN 13162-05-5

CMF C3 H5 N O



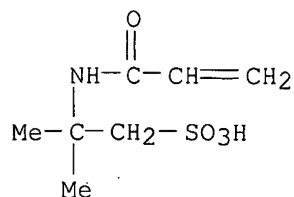
RN 288155-98-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl ester, polymer with N-ethenylformamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monoammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

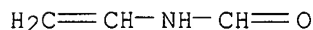
CMF C7 H13 N O4 S . H3 N

● NH<sub>3</sub>

CM 2

CRN 13162-05-5

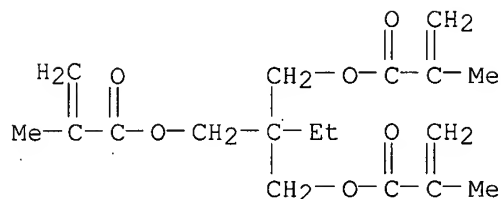
CMF C3 H5 N O



CM 3

CRN 3290-92-4

CMF C18 H26 O6



IC ICM C08F220-58

ICS C08F226-02; A61K047-32; A61K007-48

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 62, 63

IT 288155-97-5P 288155-98-6P

(water-soluble or swellable polymers for use in cosmetics)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L36 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:553366 HCAPLUS

DOCUMENT NUMBER: 133:155499

TITLE: Medical electrodes based on polymers and plasticizers

INVENTOR(S): Heard, Steve; Fox, Adrian S.; Axelgaard, Jens

PATENT ASSIGNEE(S): Axelgaard Manufacturing Company, Ltd., USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000045698	A1	20000810	WO 1999-US2620	19990208
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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2371754	A1	20000810	CA 1999-2371754	19990208
<--				
AU 9926614	A1	20000825	AU 1999-26614	19990208
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EP 1158896	A1	20011205	EP 1999-906785	19990208
<--				
R: AT, DE, DK, FR, GB, SI, LT, LV, RO				
PRIORITY APPLN. INFO.:			WO 1999-US2620	W 19990208
<--				

ED Entered STN: 11 Aug 2000

AB An electrode providing elec. contact with a patient's skin includes a conductive member adapted for connection to an external elec. apparatus, a non-liquid film for elec. interfacing to the patient's skin, the non-liquid film being elec., and mech. connected to the conductive member. The non-liquid film includes an elec. conductive organic polymer plasticized with a polyhydric alc. with the organic polymer being derived from a monomeric mixture comprising 15-30 parts/hundred (pph) acrylic acid, 0.5-30 pph N-vinylpyrrolidine and 0.01-2 pph of a crosslinking agent. The monomeric mixture may further comprise 0.5-8 pph of a thickening agent selected from the group consisting of N-vinylpyrrolidine/acrylic acid copolymers and N-vinylpyrrolidine/vinyl acetate. Thus, a formulation contained acrylic acid 20.000, N-vinylpyrrolidine/acrylic acid copolymer 1.000, 2-acrylamidopropanesulfonic acid 4.000, N-vinylpyrrolidone 4.000, Irgacure-2959 0.200, Darocure-1173 0.200, glycerin 40.000, water 24.500, NaOH 6.000 and Highlink-AA4 0.100%. The properties of the adhesive were determined

IT 287727-42-8P, Acrylamide-2-acrylamidopropanesulfonic acid-acrylic acid-Methylenebisacrylamide-1-vinyl-2-pyrrolidone copolymer 287727-43-9P, 2-Acrylamidopropanesulfonic acid-acrylic acid-Methylenebisacrylamide-1-vinyl-2-pyrrolidone copolymer

(medical electrodes based on polymers and plasticizers)

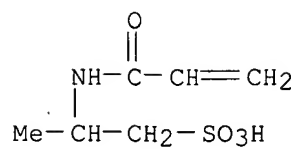
RN 287727-42-8 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone, N,N'-methylenebis[2-propenamide], 2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 33028-26-1

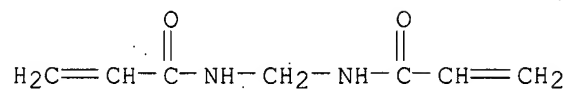
CMF C6 H11 N O4 S



CM 2

CRN 110-26-9

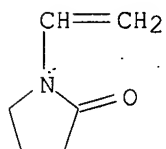
CMF C7 H10 N2 O2



CM 3

CRN 88-12-0

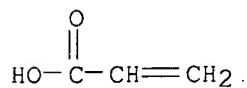
CMF C6 H9 N O



CM 4

CRN 79-10-7

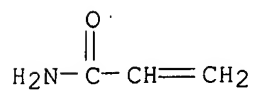
CMF C3 H4 O2



CM 5

CRN 79-06-1

CMF C3 H5 N O



RN 287727-43-9 HCAPLUS

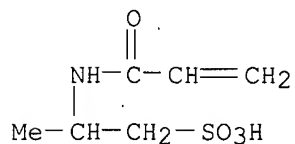
CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone,

N,N'-methylenebis[2-propenamide] and 2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 33028-26-1

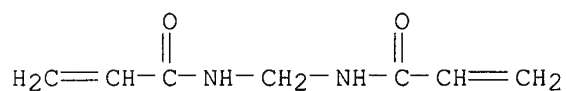
CMF C6 H11 N O4 S



CM 2

CRN 110-26-9

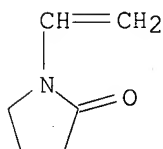
CMF C7 H10 N2 O2



CM 3

CRN 88-12-0

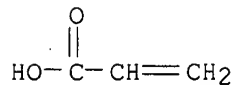
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM A61B005-0408

ICS A61N001-04

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

IT 84943-80-6P, Acrylic acid-Methylenebisacrylamide-1-vinyl-2-pyrrolidone copolymer 153188-02-4P, Acrylamide-acrylic acid-

Methylenebisacrylamide-1-vinyl-2-pyrrolidone copolymer  
 287727-42-8P, Acrylamide-2-acrylamidopropanesulfonic  
 acid-acrylic acid-Methylenebisacrylamide-1-vinyl-2-pyrrolidone  
 copolymer 287727-43-9P, 2-Acrylamidopropanesulfonic  
 acid-acrylic acid-Methylenebisacrylamide-1-vinyl-2-pyrrolidone  
 copolymer 287727-44-0P, 2-Acrylamidopropanesulfonic acid-acrylic  
 acid-1-vinyl-2-pyrrolidone copolymer

(medical electrodes based on polymers and plasticizers)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 9006-26-2,  
**Ethylene**-maleic anhydride copolymer 25086-89-9, Vinyl  
 acetate-1-vinyl-2-pyrrolidone copolymer 28062-44-4, Acrylic  
 acid-1-vinyl-2-pyrrolidone copolymer 123339-13-9, Gantrez S95  
 (medical electrodes based on polymers and plasticizers)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L36 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:43137 HCAPLUS

DOCUMENT NUMBER: 132:80411

TITLE: Dispersions of spherical N-vinyl amide crosslinked  
 copolymer particles and their manufacture

INVENTOR(S): Sakuma, Itaru; Honmura, Takashi

PATENT ASSIGNEE(S): Sekisui Plastics Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000015086	A	20000118	JP 1998-186563	19980701
PRIORITY APPLN. INFO.:			JP 1998-186563	19980701

ED Entered STN: 18 Jan 2000

AB The title dispersions are composed of 100 weight parts of crosslinked  
 copolymer particles of N-vinyl amides CH<sub>2</sub>=CHNR<sub>1</sub>COR<sub>2</sub>(whereas R<sub>1</sub> and R<sub>2</sub>  
 = H or Me)(e.g., N-vinylacetamide) and H<sub>2</sub>O-soluble vinyl compds., and  
 5-30 weight parts of hydrophobic organic solvents, whereas the copolymer  
 particles hold H<sub>2</sub>O at 10-400 weight parts per 100 weight parts. They are  
 used as thickening gelating agents. Thus, a dispersion having average  
 particle diameter 1.5 µm and water retention 40000 parts/100 parts of  
 the dispersion, was made by adding 100 g ion-exchanged H<sub>2</sub>O containing  
 N-vinylacetamide 70, Na acrylate 30, methylenebis(acrylamide) 0.2, and  
 2,2'-azobis[2-(2-imidazolin-2-yl)propane]-2HCl 0.2 g in 150 g  
 cyclohexane containing DK Ester F-10 surfactant, and suspension polymerized'

IT 148339-65-5P

(dispersions of spherical N-vinylcarboxylic amide crosslinked  
 copolymer)

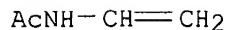
RN 148339-65-5 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-,  
 monosodium salt, polymer with N-ethenylacetamide and  
 N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 5202-78-8

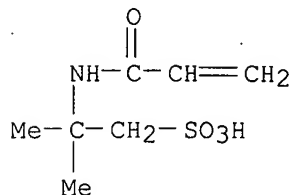
CMF C4 H7 N O



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S. . Na

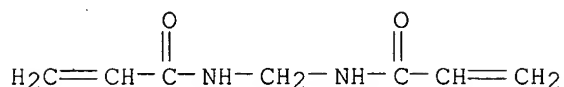


● Na

CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM B01J013-00

ICS B01F017-56; C04B024-26; C08L033-06; C08L039-00; C08L057-04;  
C09K003-00; C08F220-18; C08F226-02; C08F246-00

CC 37-5 (Plastics Manufacture and Processing)

Section cross-reference(s): 35

IT 75895-65-7P 138321-92-3P **148339-65-5P** 255058-89-0P  
255058-93-6P(dispersions of spherical N-vinylcarboxylic amide crosslinked  
copolymer)

L36 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:254107 HCAPLUS

DOCUMENT NUMBER: 130:254729

TITLE: Additives for inhibition of gas hydrate formation  
and method for inhibition of gas hydrates  
formation

INVENTOR(S): Klug, Peter; Holtrup, Frank

PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany

SOURCE: Ger., 6 pp.

CODEN: GWXXAW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19803384	C1	19990415	DE 1998-19803384	19980129
EP 933415	A2	19990804	EP 1998-124679	19981224
EP 933415	A3	19991208		
EP 933415	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 9900395	A	19990730	NO 1999-395	19990128
NO 323176	B1	20070115		
JP 11269472	A	19991005	JP 1999-20161	19990128
US 6177497	B1	20010123	US 1999-240190	19990129
PRIORITY APPLN. INFO.: DE 1998-19803384 A 19980129				

ED Entered STN: 26 Apr 1999

AB Gas hydrates formation in pipelines, especially natural gas pipelines, is prevented by adding 5-90 weight% 2-isobutoxyethanol, 5-90 weight% of a copolymer having groups derived from maleic acid, maleic anhydride, or their derivs., and  $\geq 10$  weight% of water of a monovalent or polyvalent alc. with the exception of 2-isobutoxyethanol, or mixts. of the above.

IT 221683-65-4

(additives for inhibition of gas hydrate formation and method for inhibition of gas hydrates formation)

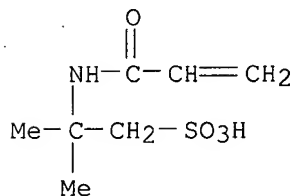
RN 221683-65-4 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



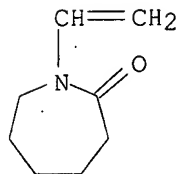
● Na

CM 2

CRN 2235-00-9

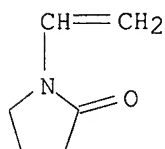
CMF C8 H13 N O





CM 3

CRN 88-12-0  
CMF C6 H9 N O



IC ICM C07C007-20

ICS E21B037-06

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

IT **Alkenes, uses**

( $\alpha$ -, polymers with vinylcaprolactam-Vinylpyrrolidone copolymer; additives for inhibition of gas hydrate formation and method for inhibition of gas hydrates formation)

IT 4439-24-1, 2-Isobutoxyethanol 9003-39-8, Polyvinylpyrrolidone

9011-07-8D, Vinylacetate-maleic anhydride copolymer, aminated

25189-83-7, Polyvinylcaprolactam 28928-28-1 51987-20-3

51987-20-3D, polymers with  $\alpha$ -olefins or N-alkylamides

102972-64-5 221683-63-2 221683-64-3 221683-65-4

221683-66-5

(additives for inhibition of gas hydrate formation and method for inhibition of gas hydrates formation)

L36 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:101237 HCAPLUS

DOCUMENT NUMBER: 130:158273

TITLE: Cleansing compositions comprising ampholyte terpolymers and methods of using the same

INVENTOR(S): Blanco, Beatriz; Matz, Gary F.

PATENT ASSIGNEE(S): Calgon Corporation, USA

SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 894489	A1	19990203	EP 1998-305161	19980630

&lt;--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO

CA 2241488	A1	19981230	CA 1998-2241488	19980622
			<--	
CN 1203784	A	19990106	CN 1998-115614	19980630
			<--	
BR 9802315	A	20000111	BR 1998-2315	19980630
			<--	
PRIORITY APPLN. INFO.:			US 1997-884831	A 19970630
			<--	

ED Entered STN: 16 Feb 1999

AB A cleansing composition comprises a cosmetically acceptable medium containing 0.05-10 % of one or more ampholyte terpolymers having an average mol. weight of 10,000-10,000,000 consisting of: (a) a nonionic monomer 1-95 %; (b) a cationic monomer 5-80 %; and (c) an anionic monomer 1-75 %. The cosmetically acceptable medium comprises a medium suitable for providing a hydrophilic cleansing product for use in direct contact with the skin of a user but not primarily for hair care. A shower gel contained water 22.2, Na cocoamphoacetate 14, disodium lauryl sulfosuccinate 30, cocamidopropyl betaine 10, isostearamidopropylmorpholine lactate 6, ethylene glycol distearate 3.5, NaCl 3, Merquat Plus 3330 11.1, and DMDM hydantoin 0.2 %.

IT 146735-78-6 146735-79-7 146735-80-0

(skin cleansers containing ampholyte terpolymers)

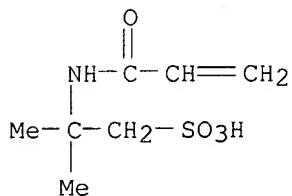
RN 146735-78-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

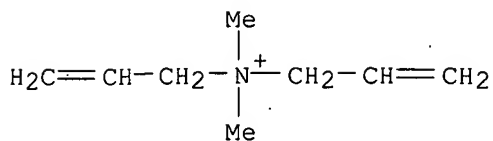
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

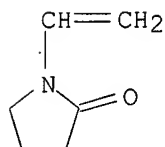
CMF C8 H16 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 88-12-0

CMF C6 H9 N O



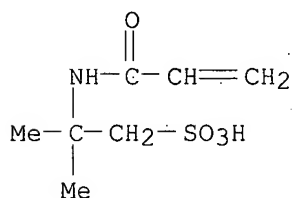
RN 146735-79-7 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

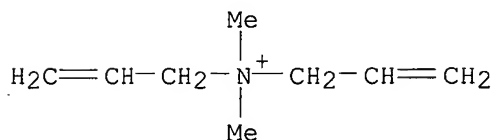
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

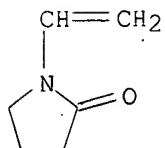
CMF C8 H16 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 88-12-0

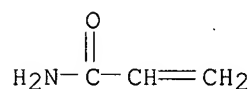
CMF C6 H9 N O



CM 4

CRN 79-06-1

CMF	C3	H5	N	O
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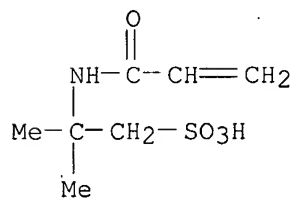
RN 146735-80-0 HCAPLUS

140755 00 0 NAME: 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
CN 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid, 2-propenamide and 2-propenoic acid (9CI) (CA  
INDEX NAME)

CM 1

CRN 15214-89-8

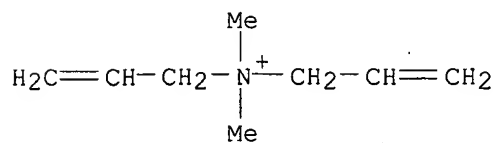
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

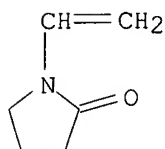
CMF C8 H16 N . Cl



●  $\text{Cl}^-$

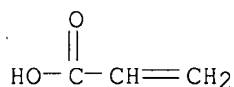
CM 3

CRN 88-12-0  
CMF C6 H9 N O



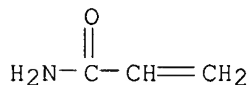
CM 4

CRN 79-10-7  
CMF C3 H4 O2



CM 5

CRN 79-06-1  
CMF C3 H5 N O



IC ICM A61K007-00  
CC 62-4 (Essential Oils and Cosmetics)  
IT 25136-75-8, Merquat Plus 3330 25136-75-8D, alkyl derivs.  
26008-01-5 87105-93-9 105030-62-4 107048-94-2 109578-73-6  
118518-53-9 146735-75-3 146735-76-4 146735-77-5  
146735-78-6 146735-79-7 146735-80-0  
146735-81-1 146735-82-2 146757-46-2 146757-47-3 146757-48-4  
146757-50-8 146757-51-9 146757-52-0 146757-53-1 146757-54-2  
146757-55-3 146757-56-4 146757-57-5 146757-58-6 146757-59-7  
146757-60-0 146757-61-1 146786-40-5 197969-51-0 220287-52-5  
220287-57-0 220287-60-5

(skin cleansers containing ampholyte terpolymers)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L36 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1997:565916 HCAPLUS  
DOCUMENT NUMBER: 127:253126  
TITLE: UV curable bioadhesives: copolymers of N-vinyl  
pyrrolidone  
AUTHOR(S): Kao, Fu-Jung; Manivannan, Gurusamy; Sawan, Samuel  
P.  
CORPORATE SOURCE: Polymer Science/Plastics Eng. Program, Dep. Chem.,

SOURCE: Univ. Massachusetts, Lowell, MA, 01854, USA  
Journal of Biomedical Materials Research (1997), 38(3), 191-196  
CODEN: JBMRBG; ISSN: 0021-9304

PUBLISHER: Wiley

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Sep 1997

AB A series of UV-curable bioadhesives was prepared from copolymers of N-vinylpyrrolidone with four different comonomers: 2-acrylamido-2-methyl-1-propanesulfonic acid, vinylsuccinimide, glycidyl acrylate, and 2-isocyanatoethyl methacrylate. The developed bioadhesives demonstrated a fast UV-induced setting with a set time of .apprx.3 min. Bond strength between the bioadhesive and porcine intestine specimen was determined by the peel test. These bioadhesives can provide improved adhesion values up to 4.6 N/m of 180° peel strength compared to five different com. bioadhesives (values ranging from 0.52 to 3.04 N/m). In addition, the fully hydrated UV curable bioadhesives have shown a high water uptake ranging from 25 to 350% and equilibrium water content ranging from 20 to 100%. Because of N-vinylpyrrolidone is a monomer all these copolymers are expected to retain good biocompatibility. Obtained promising results of peel strength and water uptake clearly suggest that the developed bioadhesives have a strong potential for many medical applications such as single-layered hydrogel wound dressings and tissue adhesives.

IT 58374-72-4P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-ethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer  
195819-29-5P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-polyethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer (preparation of UV-curable bioadhesives)

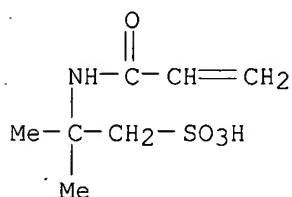
RN 58374-72-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

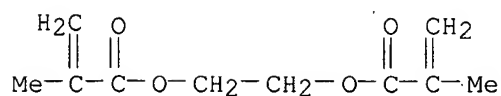
CMF C7 H13 N O4 S



CM 2

CRN 97-90-5

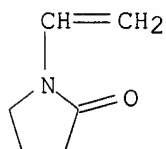
CMF C10 H14 O4



CM 3

CRN 88-12-0

CMF C6 H9 N O



RN 195819-29-5 HCAPLUS

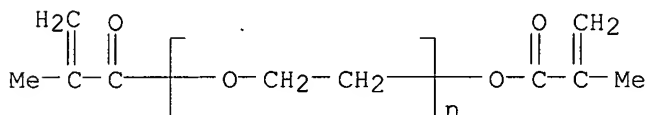
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI)  
(CA INDEX NAME)

CM 1

CRN 25852-47-5

CMF (C2 H4 O)<sub>n</sub> C8 H10 O3

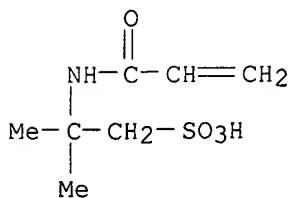
CCI PMS



CM 2

CRN 15214-89-8

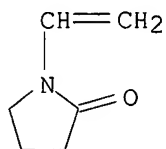
CMF C7 H13 N O4 S



CM 3

CRN 88-12-0

CMF C6 H9 N O



CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

IT 57123-13-4P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-N-vinylpyrrolidone copolymer **58374-72-4P**, 2-Acrylamido-2-methyl-1-propanesulfonic acid-**ethylene** glycol dimethacrylate-N-vinylpyrrolidone copolymer 68841-97-4P, Glycidyl acrylate-N-vinylpyrrolidone copolymer 83017-09-8P, N-Vinylpyrrolidone-N-vinylsuccinimide copolymer **195819-29-5P**, 2-Acrylamido-2-methyl-1-propanesulfonic acid-polyethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer 195819-30-8P, Glycidyl acrylate-polyethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer 195819-31-9P, **Ethylene** glycol dimethacrylate-glycidyl acrylate-N-vinylpyrrolidone copolymer 195819-32-0P, 2-Isocyanatoethyl methacrylate-polyethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer 195819-33-1P, **Ethylene** glycol dimethacrylate-2-isocyanatoethyl methacrylate-N-vinylpyrrolidone copolymer 195819-34-2P, Polyethylene glycol dimethacrylate-N-vinylpyrrolidone-N-vinylsuccinimide copolymer 195819-35-3P, **Ethylene** glycol dimethacrylate-N-vinylpyrrolidone-N-vinylsuccinimide copolymer 195819-36-4P, 2-Isocyanatoethyl methacrylate-N-vinylpyrrolidone copolymer (preparation of UV-curable bioadhesives)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:302381 HCAPLUS

DOCUMENT NUMBER: 124:345503

TITLE: Crosslinked polymers and their uses as liquid absorbents

INVENTOR(S): Hashimoto, Akira; Yamaguchi, Tetsuhiko

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 08059743	A	19960305	JP 1994-199687	19940824
PRIORITY APPLN. INFO.:			JP 1994-199687	19940824

ED Entered STN: 23 May 1996

AB The polymers absorbing  $\geq 10$ -fold H<sub>2</sub>O are obtained by copolymer of CH<sub>2</sub>:CHNR<sub>1</sub>COR<sub>2</sub> (I; R<sub>1</sub>, R<sub>2</sub> = H, Me) or mixts. of I and other comonomers with compds. having  $\geq 2$  allyl groups or  $\geq 2$  vinyl esters. The polymers are useful for retention of plant nutrition media, body fluid absorption, and moisture absorbent aids,



etc. Thus, 250 g N-vinylacetamide and 600 mg tetraallyloxyethane were treated in H<sub>2</sub>O in the presence of 2,2'-azobis(2-amidinopropane) and dried at 50° for 12 h to give a polymer showing absorption 54 folds for EtOH, 60 for isotonic saline, 43 for saturated NaCl solution, and 60 for artificial urine.

IT 176839-58-0P

(crosslinked vinylcarboxamide polymers for liquid absorbents)

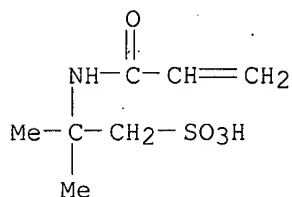
RN 176839-58-0 HCAPLUS

CN Hexanedioic acid, di-2-propenyl ester, polymer with N-ethenylacetamide, N,N'-methylenebis[2-propenamide], 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

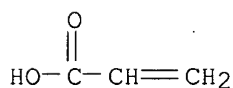
CMF C7 H13 N O4 S



CM 2

CRN 7446-81-3

CMF C3 H4 O2 . Na

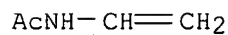


● Na

CM 3

CRN 5202-78-8

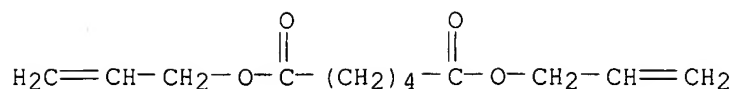
CMF C4 H7 N O



CM 4

CRN 2998-04-1

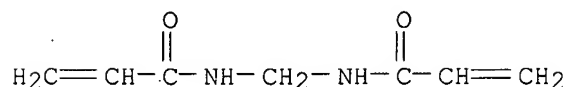
CMF C12 H18 O4



CM 5

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F026-02

ICS B01J020-26; C08F020-20

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 19, 57, 58, 63

IT 176839-49-9P 176839-50-2P 176839-51-3P 176839-52-4P

176839-53-5P 176839-54-6P 176839-55-7P 176839-56-8P

176839-57-9P **176839-58-0P**

(crosslinked vinylcarboxamide polymers for liquid absorbents)

L36 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:773225 HCAPLUS

DOCUMENT NUMBER: 123:314882

TITLE: Liquid-absorbing polymers and their use in concentration of biopolymers

INVENTOR(S): Echigo, Keiko; Ishii, Tetsuya; Yamaguchi, Tetsuhiko

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07155592	A	19950620	JP 1993-305533	19931206
PRIORITY APPLN. INFO.:			JP 1993-305533	19931206

ED Entered STN: 02 Sep 1995

AB Title polymers comprise crosslinked polymers obtained by polymerizing  $\text{H}_2\text{C}:\text{CHNR}_1\text{COR}_2$  ( $\text{R}_1, \text{R}_2 = \text{H}, \text{Me}$ ) or a mixture with 0.1-50 mol%  $\text{H}_2\text{C}:\text{CR}_3\text{X}$  ( $\text{R}_3 = \text{H}, \text{Me}; \text{X} = \text{CO}_2\text{R}_4, \text{CONH}_2, \text{CONHR}_5, \text{cyano}, \text{COR}_6, \text{O}_2\text{CR}_7, \text{OR}_8; \text{R}_4, \text{R}_5 = \text{C1-4 alkyl}; \text{R}_4 \text{ and } \text{R}_5 \text{ may be substituted with OH, NMe}_2, \text{NEt}_2, \text{SO}_3\text{M}; \text{M} = \text{alkali metal}; \text{R}_6-8 = \text{C1-4 alkyl}) \text{ and/or N-vinyl-2-pyrrolidone in the presence of } \geq 1 \text{ crosslinking agent. The polymers absorb only low-mol.-weight components when contacted with a solution containing polymers. Thus, dry gel of N-vinylacetamide-N,N'-methylenebisacrylamide copolymer showed relative liquid absorption [= (weight of gel swollen by 0.9% physiology saline)/(weight of gel swollen by deionized water)] 0.98 and recovery of lysozyme [= [protein concentration (ppm) after addition of gel] + [volume of filtrate (mL)]/[protein$

concentration (ppm) before addition of gel] + 40 (mL)] 0.95.

IT 169956-01-8P

(crosslinked; liquid absorbents for concentration of biopolymers)

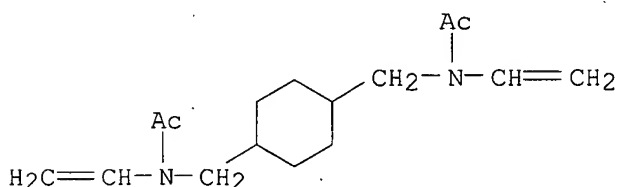
RN 169956-01-8 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N,N'-[1,4-cyclohexanediylbis(methylene)] bis[N-ethenylacetamide] and N-ethenylacetamide (9CI) (CA INDEX NAME)

CM 1

CRN 142648-73-5

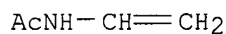
CMF C16 H26 N2 O2



CM 2

CRN 5202-78-8

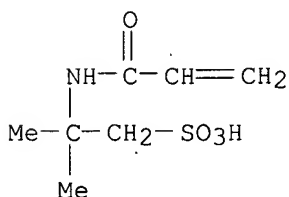
CMF C4 H7 N O



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM B01J020-26

ICS C08F226-02; C08F226-10

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 105060-25-1P, N,N'-Methylenebisacrylamide-N-vinylformamide copolymer

147233-68-9P 147233-72-5P 169955-98-0P 169955-99-1P

169956-00-7P 169956-01-8P 169956-02-9P 169956-03-0P

169956-04-1P 170312-80-8P

(crosslinked; liquid absorbents for concentration of biopolymers)

L36 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:214226 HCAPLUS

DOCUMENT NUMBER: 118:214226

TITLE: Fine particulate crosslinked type N-vinylamide resin and microgel, process for preparing same, and use thereof

INVENTOR(S): Aizawa, Toshiyuki; Nakamura, Hitoshi; Yamaguchi, Tetsuhiko

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 510246	A1	19921028	EP 1991-112072	19910718
			<--	
EP 510246	B1	19960925		
R: DE, FR, GB				
JP 04323213	A	19921112	JP 1991-92325	19910423
			<--	
JP 3042546	B2	20000515		
US 5280095	A	19940118	US 1991-723038	19910628
			<--	
US 5338815	A	19940816	US 1993-159242	19931130
			<--	
PRIORITY APPLN. INFO.:			JP 1991-92325	A 19910423
			<--	
			US 1991-723038	A3 19910628
			<--	

ED Entered STN: 29 May 1993

AB The title polymer ( $\leq 10 \mu\text{m}$ ) contained chain repeat units  $-\text{[CH}_2\text{CH(R}_1\text{NCOR}_2\text{)]}_m-$  ( $\text{R}_1, \text{R}_2 = \text{H or Me}$ ) or copolymer with other ethylenically unsatd. monomers. Polymerization of 99 g N-vinylacetamide and 1.0 g N,N'-methylenebis(acrylamide) in benzene in the presence of 0.1 g AIBN gave fine white powder polymer ( $2 \mu\text{m}$ ), which was added as a 1% dispersion in water showing viscosity 5000 cP. The polymer with good thickening ability, particularly in solution containing ions, and gelling ability was used in formulations which could be used in making glues, hand lotions, batteries, and detergents.

IT 147350-56-9P

(preparation of, with good thickening ability and dispersion stability in aqueous and organic solns., for use in various formulations)

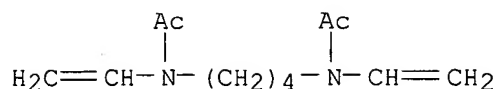
RN 147350-56-9 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with N,N'-1,4-butanediylbis[N-ethenylacetamide] and N-ethenylacetamide (9CI) (CA INDEX NAME)

CM 1

CRN 142630-13-5

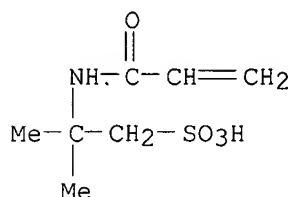
CMF C12 H20 N2 O2



CM 2

CRN 15214-89-8

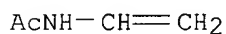
CMF C7 H13 N O4 S



CM 3

CRN 5202-78-8

CMF C4 H7 N O



IC ICM C08F226-02

ICS C10M107-42

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 45, 62, 63, 76

IT 147233-68-9P 147233-69-0P 147233-70-3P 147233-71-4P

147233-72-5P 147233-73-6P 147233-74-7P 147350-56-9P

147350-57-0P

(preparation of, with good thickening ability and dispersion stability  
in aqueous and organic solns., for use in various formulations)

L36 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:103867 HCAPLUS

DOCUMENT NUMBER: 118:103867

TITLE: Photocurable **ethylenically** unsaturated  
compound polymer gel base materialsINVENTOR(S): Ohashi, Yoshinobu; Takeyama, Shuichi; Yoneyama,  
TsunehidePATENT ASSIGNEE(S): Yokohama Rubber Co., Ltd., Japan; Takasago  
Perfumery Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

JP 04239504

A

19920827

JP 1991-5663

19910122

&lt;--

PRIORITY APPLN. INFO.:

JP 1991-5663

19910122

&lt;--

ED Entered STN: 19 Mar 1993

AB The title materials, useful for aqueous gel compns. containing perfumes, deodorants, insecticides, enzymes, etc., contain photopolymn. initiators, **ethylenic** compds. containing tertiary ammonium and/or sulfo groups, **ethylenic** compds. containing hydrophilic groups, and water-soluble compds. containing  $\geq 2$  **ethylenic** groups. A solution of  $\text{H}_2\text{C}:\text{CHCONH}(\text{CH}_2)_3\text{NMe}_3^+ \text{Cl}^-$  50,  $\text{H}_2\text{C}:\text{CHCO}_2(\text{CH}_2\text{CH}_2\text{O})_{14}\text{COCH}:\text{CH}_2$  40, N-vinyl-2-pyrrolidinone 10, and p-( $\text{HOCH}_2\text{CH}_2\text{O}$ ) $\text{C}_6\text{H}_4\text{COCMe}_2\text{OH}$  2 parts was irradiated with UV light to give a transparent gel.

IT 146242-84-4

(gels, aqueous, transparent, as carriers for volatile compds.)

RN 146242-84-4 HCAPLUS

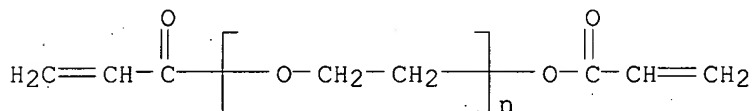
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 1-ethenyl-2-pyrrolidinone and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26570-48-9

CMF (C2 H4 O) $_n$  C6 H6 O3

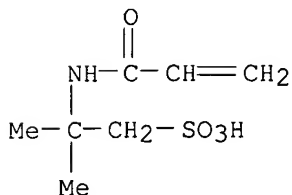
CCI PMS



CM 2

CRN 15214-89-8

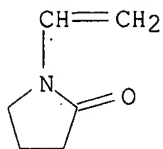
CMF C7 H13 N O4 S



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08F002-48  
ICS C08F220-34; C08F220-54; C08F220-60; C08F222-02; C08F226-10;  
C08F299-02

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38

ST **ethylenic** polymer gel transparency; photopolymn  
**ethylenic** polymer gel; polymn photo **ethylenic**  
polymer gel; acrylic polymer gel photopolymn; carrier polymer volatile  
compd; perfume carrier polymer gel; deodorant carrier polymer gel;  
insecticide carrier polymer gel

IT 146058-66-4 146242-81-1 146242-82-2 146242-83-3  
146242-84-4 146242-85-5  
(gels, aqueous, transparent, as carriers for volatile compds.)

L36 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1992:613204 HCAPLUS  
DOCUMENT NUMBER: 117:213204  
TITLE: Water soluble copolymers for use in bore-hole  
fluids  
INVENTOR(S): Hille, Martin; Wittkus, Heinz; Tonhauser, Juergen;  
Engelhardt, Fritz; Riegel, Ulrich  
PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
SOURCE: Eur. Pat. Appl., 16 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 483638	A1	19920506	EP 1991-117945	19911022
EP 483638	B1	19960612		
R: CH, DE, FR, GB, IT, LI, NL				
DE 4034642	A1	19920507	DE 1990-4034642	19901031
CA 2054518	A1	19920501	CA 1991-2054518	19911030
NO 9104252	A	19920504	NO 1991-4252	19911030
NO 300643	B1	19970630		
BR 9104709	A	19920616	BR 1991-4709	19911030
JP 05186537	A	19930727	JP 1991-285068	19911030
US 5510436	A	19960423	US 1994-260037	19940615
PRIORITY APPLN. INFO.:			DE 1990-4034642	A 19901031
			US 1991-785448	B1 19911031

ED Entered STN: 28 Nov 1992

AB The title polymers, with low viscosity and which do not give up water to porous formations, contain 50-90% groups -CH(R1)CH(CONHZSO3M)- (R1 = H, Me; M = NH4, alkali metal; Z = C2-10 alkylene) and 90-5% groups -CH:CHCH2N+(R3)(R4)CH2CH:CH- X- (R3, R4 = alkyl; X = halo). AIBN-initiated polymerization of (acrylamidomethyl)propylsulfonate 65, N-methyl-N-vinylacetamide 20, and diallyldimethylammonium chloride 25

g in tert-BuOH at 75-80° gave 105 g powdered polymer with bulk d. 0.3 g/cm<sup>3</sup> and Fikentscher K-value 162. Use of the polymers to prevent water loss in boreholes is exemplified.

IT 144306-58-1P 144306-60-5P 144306-61-6P  
144306-63-8P 144306-64-9P

(manufacture of water-soluble, for use in borehole fluids)

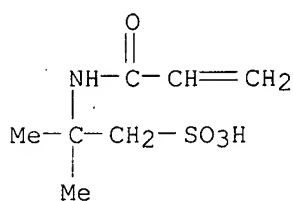
RN 144306-58-1 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N-ethenyl-N-methylacetamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

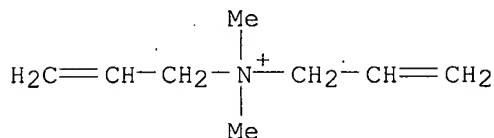
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

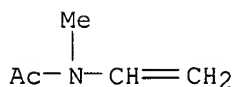


● Cl<sup>-</sup>

CM 3

CRN 3195-78-6

CMF C5 H9 N O



RN 144306-60-5 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N-ethenyl-N-methylacetamide, methyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA

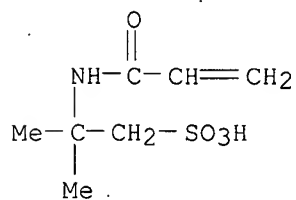


INDEX NAME)

CM 1

CRN 15214-89-8

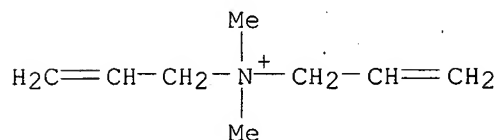
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

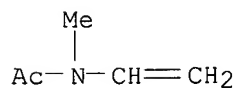
CMF C8 H16 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 3195-78-6

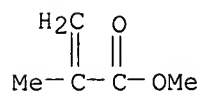
CMF C5 H9 N O



CM 4

CRN 80-62-6

CMF C5 H8 O2



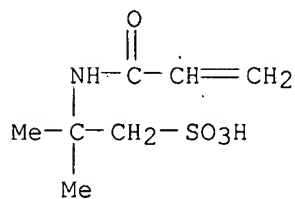
RN 144306-61-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
N-ethenyl-N-methylacetamide, 1-ethenyl-2-pyrrolidinone and  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA  
INDEX NAME)

CM 1

CRN 15214-89-8

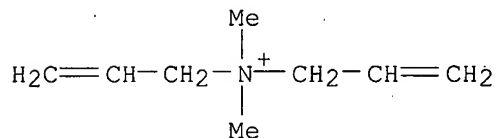
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

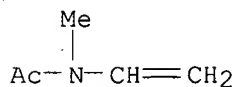


● Cl<sup>-</sup>

CM 3

CRN 3195-78-6

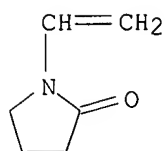
CMF C5 H9 N O



CM 4

CRN 88-12-0

CMF C6 H9 N O



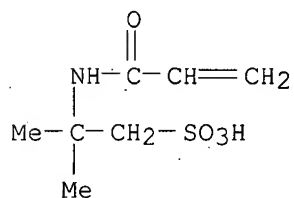
RN 144306-63-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with dodecyl 2-propenoate, N-ethenyl-N-methylacetamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

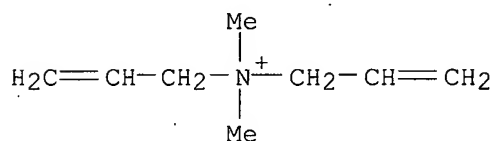
CMF C7 H13 N O4 S



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

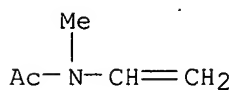


- $\text{Cl}^-$

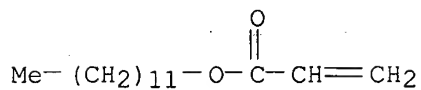
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CRN 3195-78-6

CMF C5 H9 N O



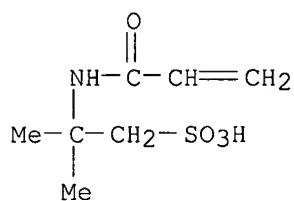
CM 4

CRN 2156-97-0  
CMF C15 H28 O2

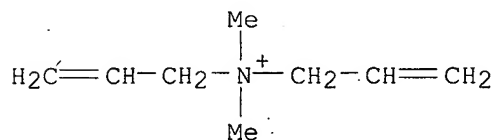
RN 144306-64-9 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with ethenesulfonic acid, N-ethenyl-N-methylacetamide, 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

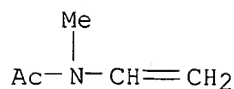
CRN 15214-89-8  
CMF C7 H13 N O4 S

CM 2

CRN 7398-69-8  
CMF C8 H16 N . Cl● Cl<sup>-</sup>

CM 3

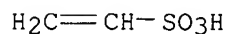
CRN 3195-78-6  
CMF C5 H9 N O



CM 4

CRN 1184-84-5

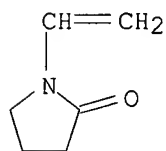
CMF C2 H4 O3 S



CM 5

CRN 88-12-0

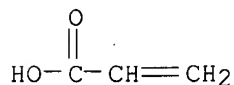
CMF C6 H9 N O



CM 6

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F220-58

ICS C08F226-04; C04B024-26; C09K007-02

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 51

IT 144306-58-1P 144306-59-2P 144306-60-5P

144306-61-6P 144306-63-8P 144306-64-9P

(manufacture of water-soluble, for use in borehole fluids)

L36 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:471239 HCAPLUS

DOCUMENT NUMBER: 117:71239

TITLE: Liquid-absorbing vinyl polymers

INVENTOR(S): Aizawa, Toshiyuki; Nakamura, Hitoshi; Hosoda, Yoshikazu

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT, NO.	KIND	DATE	APPLICATION NO.	DATE
EP 473881	A1	19920311	EP 1991-107965	19910516
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EP 473881	B1	20011107		
R: DE, FR, GB				
JP 04230250	A	19920819	JP 1991-116193	19910521
			<--	
JP 2947637	B2	19990913		
US 5300606	A	19940405	US 1993-31022	19930311
			<--	
US 5407996	A	19950418	US 1994-197747	19940217
			<--	
PRIORITY APPLN. INFO.:			JP 1990-230550	A 19900903
			<--	
			US 1991-701911	B1 19910517
			<--	
			US 1993-31022	A1 19930311
			<--	

ED Entered STN: 23 Aug 1992

AB Crosslinked polymers for absorbing H<sub>2</sub>O or organic solvents comprises ≥50% N-vinylcarboxylic acid amide units; they are chemical stable and good absorbents for liqs. in a system in which metal and organic ions coexist. The polymers, as a result of absorbing a liquid, are swelled or gelled to nonfluidize and solidify the system, with a slow releasability of the liquid. E.g., an N,N'-1,4-butylenebis (N-vinylacetamide)-crosslinked N-vinylacetamide polymer (d.p. 20,000) is prepared and gelled in aqueous solns. of fertilizers to give compns. useful for fertilizing, soil improvement, and as an artificial culture medium.

IT 142655-44-5

(absorbents, for liqs., preparation and use of)

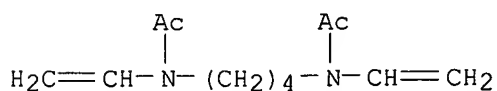
RN 142655-44-5 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N,N'-1,4-butanediylbis[N-ethenylacetamide] and N-ethenylacetamide (9CI) (CA INDEX NAME)

CM 1

CRN 142630-13-5

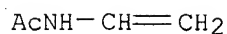
CMF C12 H20 N2 O2



CM 2

CRN 5202-78-8

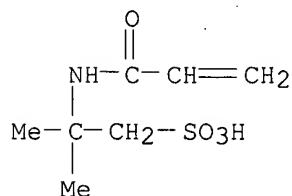
CMF C4 H7 N O



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

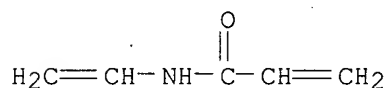
IC ICM C08F226-02  
ICS A61L015-24; A61L015-60; C08F026-02  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 19, 57, 58, 63  
ST liq absorbent crosslinked vinylcarboxamide polymer; agricultural liq absorbent vinylcarboxamide polymer; sanitary napkin absorbent vinylcarboxamide polymer; concrete liq absorbent vinylcarboxamide polymer; solvent absorbent vinylcarboxamide polymer; **butylenebisvinylacetamide** polymer; liq absorbent  
IT 138321-92-3 142630-14-6 142630-15-7 142630-16-8 142630-17-9  
142630-18-0 142630-20-4 142630-22-6 142630-24-8 142630-26-0  
142630-27-1 142630-32-8 142630-33-9 142630-34-0 142630-35-1  
142630-36-2 142630-37-3 142630-38-4 142630-39-5 142630-40-8  
142630-41-9 142630-42-0 142630-43-1 142630-44-2 142630-45-3  
142630-46-4 142630-47-5 142630-48-6 142630-49-7 142648-72-4  
142648-74-6 142648-75-7 142648-76-8 **142655-44-5**  
142675-63-6 142739-89-7  
(absorbents, for liqs., preparation and use of)

L36 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1992:257009 HCAPLUS  
DOCUMENT NUMBER: 116:257009  
TITLE: Manufacture of water absorbents  
INVENTOR(S): Sugita, Shuichi; Marumo, Kuniomi; Imamura, Kunio; Hosoda, Kiichi  
PATENT ASSIGNEE(S): Showa Denko K. K., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03223304	A	19911002	JP 1990-315483	19901119

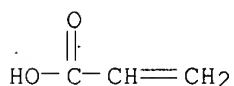
JP 3091215 B2 20000925  
PRIORITY APPLN. INFO.: JP 1989-302409 A1 19891121

ED Entered STN: 27 Jun 1992  
AB Water absorbents having good gel strength and good chemical resistance are prepared by polymerization of  $H_2C:CHNR_1COR_2$  ( $R_1, R_2 = H, Me$ ) with crosslinking agents. Thus, radical polymerization of 200 g N-vinylacetamide with 1 g N,N'-methylenebisacrylamide gave polymers capable of absorbing 122.4-fold 0.9% aqueous NaCl solution  
IT 138719-04-7P  
(preparation of, for water absorbents)  
RN 138719-04-7 HCAPLUS  
CN 2-Propenoic acid, sodium salt, polymer with N-ethenyl-2-propenamide, N,N'-methylenebis[2-propenamide] and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)  
CM 1  
CRN 44565-77-7  
CMF C5 H7 N O



CM 2

CRN 7446-81-3  
CMF C3 H4 O2 . Na

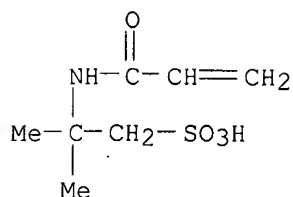


● Na

CM 3

CRN 5165-97-9  
CMF C7 H13 N O4 S . Na



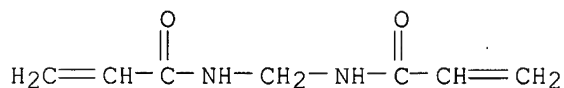


● Na

CM~ 4

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F008-00

ICS C08F220-28; C08F220-34; C08F222-02; C08F226-02; C08F226-10;  
C08F228-02

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 35

IT 105060-25-1P, N,N'-Methylenebisacrylamide-N-vinylformamide copolymer

138719-01-4P 138719-02-5P 138719-03-6P **138719-04-7P**

138719-05-8P 138719-06-9P 138719-07-0P

(preparation of, for water absorbents)

L36 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:62692 HCAPLUS

DOCUMENT NUMBER: 102:62692

TITLE: Hydrophilic crosslinked copolymers and their use

INVENTOR(S): Engelhardt, Friedrich; Kuehleln, Klaus; Balzer,  
Juliane; Duersch, Walter; Kleiner, Hans Jerg

PATENT ASSIGNEE(S): Cassella A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 37 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3314569	A1	19841025	DE 1983-3314569	19830422
NO 8401405	A	19841023	NO 1984-1405	19840409
US 4585845	A	19860429	US 1984-597839	19840409
BR 8401839	A	19841127	BR 1984-1839	19840418
EP 123297	A2	19841031	EP 1984-104477	19840419
EP 123297	A3	19851227		
EP 123297	B1	19880803		

R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE

CA 1225794	A1	19870818	CA 1984-452440	19840419
AT 36168	T	19880815	AT 1984-104477	19840419
JP 60042403	A	19850306	JP 1984-78794	19840420
PRIORITY APPLN. INFO.:			DE 1983-3314569	A 19830422
			EP 1984-104477	A 19840419

OTHER SOURCE(S): MARPAT 102:62692

ED Entered STN: 24 Feb 1985

AB Polymers in which crosslinking occurs via nonlinear polyphosphate groups are prepared by polymerizing vinyl compds. in the presence of monomers such as RO(CH<sub>2</sub>:CH)P(O)O[(CH<sub>2</sub>:CH)P(O)O]<sub>m</sub>P(O)(CH:CH<sub>2</sub>)OR<sub>1</sub> (I; R, R<sub>2</sub> = H or C1-4 alkyl; m = 0-6) and are useful as acid-soluble coatings and encapsulating materials. Thus, a solution of acrylamide 97.2, 2-acrylamido-2-methyl-1-propanesulfonic acid 9.7, vinylsulfonic acid 2:0, and I (R, R<sub>1</sub> = H, m = 0) 0.5 g in 105 mL water was adjusted to pH 8.5 with 25% NH<sub>4</sub>OH and added to a solution of 7.2 g Arkopal N 100 (ethoxylated nonylphenol derivative emulsifier) and 19.4 g Span 80 in Isopar M (isoparaffin, b.p. 200-240°). The reaction vessel was evacuated and filled with N before adding a solution of 0.0275 g (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> to the above mixture which was then heated for 1.5 h at 30-40° to give a stable copolymer [94558-32-4] emulsion which could be inverted in water to form a highly viscous, thixotropic composition

IT 94558-30-2P 94558-31-3P 94588-45-1P  
(manufacture of crosslinked)

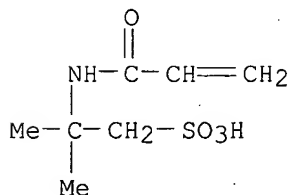
RN 94558-30-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with diethenyldiphosphonic acid, N-ethenyl-N-methylacetamide, ethenylphosphonic acid, ethyl hydrogen ethenylphosphonate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

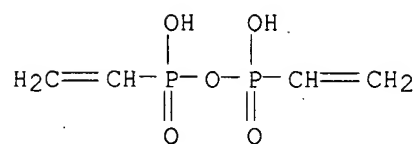
CMF C7 H13 N O4 S



CM 2

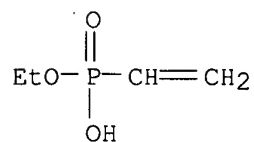
CRN 6997-95-1

CMF C4 H8 O5 P2



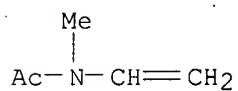
CM 3

CRN 4546-13-8  
CMF C4 H9 O3 P



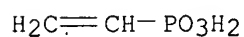
CM 4

CRN 3195-78-6  
CMF C5 H9 N O



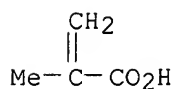
CM 5

CRN 1746-03-8  
CMF C2 H5 O3 P



CM 6

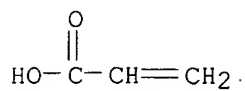
CRN 79-41-4  
CMF C4 H6 O2



CM 7

CRN 79-10-7

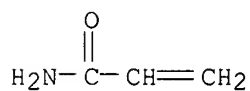
CMF C3 H4 O2



CM 8

CRN 79-06-1

CMF C3 H5 N O



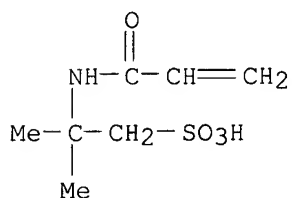
RN 94558-31-3 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with diethenyldiphosphonic acid, N-ethenylformamide, ethenylphosphonic acid, ethyl hydrogen ethenylphosphonate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

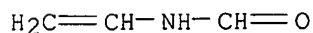
CMF C7 H13 N O4 S



CM 2

CRN 13162-05-5

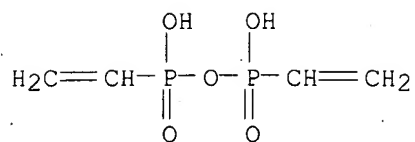
CMF C3 H5 N O



CM 3

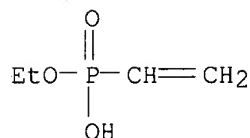
CRN 6997-95-1

CMF C4 H8 O5 P2



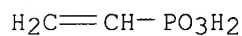
CM 4

CRN 4546-13-8  
CMF C4 H9 O3 P



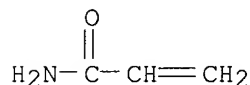
CM 5

CRN 1746-03-8  
CMF C2 H5 O3 P



CM 6

CRN 79-06-1  
CMF C3 H5 N O

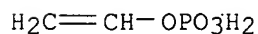


RN 94588-45-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with diethenyldiphosphonic acid, ethenyl dihydrogen phosphate, N-ethenylformamide, N-ethenyl-N-methylacetamide, ethyl hydrogen ethenylphosphonate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

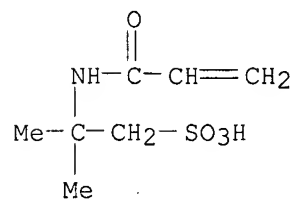
CRN 36885-49-1  
CMF C2 H5 O4 P



CM 2

CRN 15214-89-8

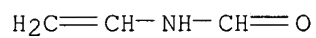
CMF C7 H13 N O4 S



CM 3

CRN 13162-05-5

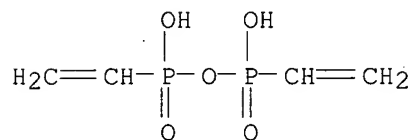
CMF C3 H5 N O



CM 4

CRN 6997-95-1

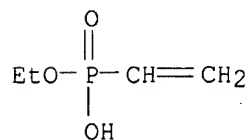
CMF C4 H8 O5 P2



CM 5

CRN 4546-13-8

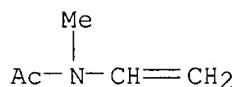
CMF C4 H9 O3 P



CM 6

CRN 3195-78-6

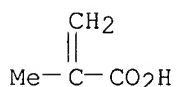
CMF C5 H9 N O



CM 7

CRN 79-41-4

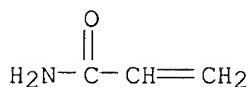
CMF C4 H6 O2



CM 8

CRN 79-06-1

CMF C3 H5 N O



IC C08F230-02; C08F220-56; C09D003-727; A61F013-16; A61K007-00  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 IT 79-06-1DP, polymers with acrylamidomethylproanesulfonic acid and vinylphosphonic acid polyanhydride 1746-03-8DP, polyanhydride derivs., polymers with acrylamide and acrylamidomethylproanesulfonic acid 15214-89-8DP, polymers with acrylamide and vinylphosphonic acid polyanhydrides 94558-29-9P **94558-30-2P 94558-31-3P** 94558-32-4P 94558-33-5P 94558-34-6P 94558-35-7P 94558-36-8P **94588-45-1P**  
 (manufacture of crosslinked)

L36 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:615440 HCAPLUS

DOCUMENT NUMBER: 99:215440

TITLE: Water-soluble copolymers and their utilization

INVENTOR(S): Uhl, Klaus; Bannerman, James K.; Engelhardt, Friedrich; Patel, Arvind

PATENT ASSIGNEE(S): Cassella A.-G., Fed. Rep. Ger.; Hoechst A.-G.; Dresser Industries, Inc.

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8302449	A1	19830721	WO 1982-EP264	19821214
W: AU, BR, DK, FI, JP, NO, SU				

RW: AT, BE, CH, DE, FR, GB, NL, SE

US 4471097	A	19840911	US 1982-338543	19820111
AU 8310194	A	19830728	AU 1983-10194	19821214
BR 8208082	A	19840508	BR 1982-8082	19821214
EP 111486	A1	19840627	EP 1983-900030	19821214

R: AT, BE, CH, DE, FR, GB, LI, NL, SE

ZA 8300134	A	19831228	ZA 1983-134	19830110
FI 8302997	A	19830822	FI 1983-2997	19830822
NO 8303078	A	19830826	NO 1983-3078	19830826
DK 8304111	A	19830909	DK 1983-4111	19830909
JP 58502213	T	19831222	JP 1983-500140	19830909

PRIORITY APPLN. INFO.:

US 1982-338543 A 19820111

WO 1982-EP264 A 19821214

ED Entered STN: 12 May 1984

AB Water-loss additives for drilling fluids consist of water-soluble copolymers prepared from polar vinyl monomers (e.g., 2-acrylamido-2-methylpropanesulfonic acid, N-vinylformamide, methacrylamide, N-vinyl-N-methylacetamide, and acrylates or methacrylates). Crosslinking agents include ethoxylated sorbitan trioleate, diglycerin sesquinoate, trimethylolpropane triacrylate, divinylbenzene, and polyvinyl alc. The copolymers are prepared by free-radical emulsion polymerization

IT 87889-32-5

(water-loss control additive, drilling fluids containing)

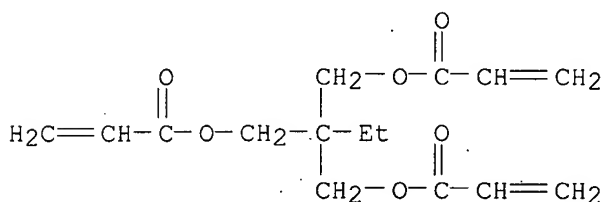
RN 87889-32-5 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-1H-imidazole, N-ethenyl-N-methylacetamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5

CMF C15 H20 O6

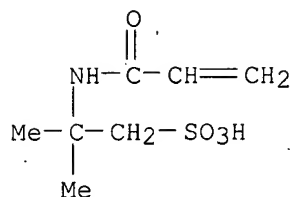


CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S

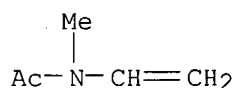




CM 3

CRN 3195-78-6

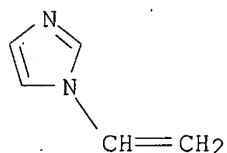
CMF C5 H9 N O



CM 4

CRN 1072-63-5

CMF C5 H6 N2



IC C08F220-58; C08F220-56; C08F246-00; C09K007-00

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 38

IT	87889-14-3	87889-15-4	87889-16-5	87889-17-6	87889-18-7
	87889-19-8	87889-20-1	87889-21-2	87889-22-3	87889-23-4
	87889-24-5	87889-25-6	87889-26-7	87889-27-8	87889-28-9
	87889-29-0	87889-30-3	87889-31-4	<b>87889-32-5</b>	87889-33-6
	87889-34-7	87910-78-9	87910-79-0	87910-80-3	87910-81-4
	87910-82-5	87910-83-6	87910-84-7	87910-85-8	87911-70-4
	87911-71-5	87911-72-6	87911-85-1	87934-20-1	87934-21-2
	87934-22-3	87934-23-4	87945-54-8	88342-75-0	88342-76-1

(water-loss control additive, drilling fluids containing)

L36 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:225247 HCAPLUS

DOCUMENT NUMBER: 98:225247

TITLE: Photographic photosensitive silver halide materials

INVENTOR(S): Ogawa, Masashi; Ishigaki, Kunio; Iwasaki, Nobuyuki; Nakamura, Taku

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Ger. Offen., 52 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3223621	A1	19830113	DE 1982-3223621	19820624
			<--	
DE 3223621	C2	19910912		
JP 57212427	A	19821227	JP 1981-97998	19810624
			<--	
JP 61035539	B	19860813		
GB 2103817	A	19830223	GB 1982-18354	19820624
			<--	
GB 2103817	B	19841219		
US 4508818	A	19850402	US 1984-592763	19840326

PRIORITY APPLN. INFO.:  
 JP 1981-97998 A 19810624  
 <--  
 US 1982-391663 A1 19820624  
 <--

ED Entered STN: 12 May 1984

AB Photog. films having improved mech. characteristics and which give decreased amts. of developer sludge are described. These films, which are especially useful for development by automatic development devices, consist of a support, a photosensitive gelatin-Ag halide emulsion layer, a 1st nonphotosensitive layer with a melting time that is the same or higher than the melting time of the gelatin-Ag halide emulsion layer, and a 2nd nonphotosensitive layer that has a melting time that is higher than that of the 1st nonphotosensitive layer. The ratio between the melting times of the outermost layer and the gelatin-Ag halide emulsion is >3 and <6. Thus, upon both sides of a subbed poly(ethylene terephthalate) were coated a gelatin-Ag(Br,I) (2 mol. % I-) emulsion layer containing 1-phenyl-5-mercaptopotetrazole and 4-hydroxy(1,3,3a,7)tetraazaindene as antifoggants and 1,2-bis(vinylsulfonylacetamido)ethane (0.40 mmol/100 g gelatin) as hardener, a gelatin interlayer containing N-oleoyl-N-methyltaurine Na salt as a coating aid and Na acrylamido-2-methylpropanesulfonate-2-[3-(vinylsulfonyl)propionyloxy]ethyl acrylate copolymer (0.9 mequiv./100 g gelatin) as hardener, and a gelatin protective layer containing the above-mentioned coating aid, poly(Me methacrylate) as matting agent, and 2-[3-(chloroethylsulfonyl)propionyloxy]ethyl acrylate-Na acrylamido-2-methylpropanesulfonate copolymer (1.8 mequiv./100 g gelatin) as hardener. The resultant film showed a melting time of the 1st and emulsion layers (0.2 N NaOH; 60°) of 328 and 39 s, resp., a film scratch resistance of 53 g after immersion in 35° developer for 25 s, no reticulation upon development at 35° in an automatic developer, no visible sludge formation in the fixer after processing, no film soiling after <200 sheets were processed, and only 95 mg of dissolved gelatin/100 cm<sup>3</sup> of developer solution vs. 36 and 36 s, 50 g, no reticulation, visible sludge formation in the fixer, film soiling after only 25 sheets were processed, and 210 mg of dissolved gelatin/100 cm<sup>3</sup> of developer solution for a control containing no hardeners in the interlayer and top layer.

IT 85899-10-1

(photog. hardening agent)

RN 85899-10-1 HCAPLUS

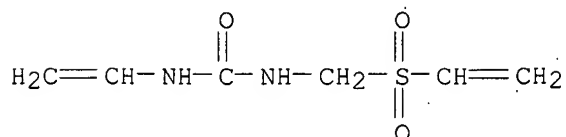
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-ethenyl-N'-

[(ethenylsulfonyl)methyl]urea (9CI) (CA INDEX NAME)

CM 1

CRN 85899-09-8

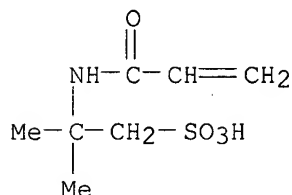
CMF C6 H10 N2 O3 S



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC G03C001-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT	81869-03-6	85899-06-5	85899-08-7	<b>85899-10-1</b>	85899-12-3
	85899-14-5	85899-16-7	85899-18-9	85899-20-3	85899-21-4
	85899-23-6	85899-25-8	85899-26-9	85899-27-0	85899-28-1
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	85899-35-0	85899-36-1	85899-37-2	85899-38-3	85899-39-4
	85899-40-7	85899-42-9	85899-43-0	85899-44-1	85899-45-2
	85899-46-3	85899-47-4	85899-48-5	85899-49-6	85899-50-9
	85899-52-1	85899-57-6	85899-58-7	85899-59-8	

(photog. hardening agent)

L36 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:166945 HCAPLUS

DOCUMENT NUMBER: 98:166945

TITLE: Crosslinked copolymers swellable in water and their use as absorbent material for aqueous body fluids, such as urine and other electrolyte-containing aqueous fluids

INVENTOR(S): Chmelir, Miroslav; Dahman, Kurt; Tuerk, Wolfgang  
 PATENT ASSIGNEE(S): Chemische Fabrik Stockhausen G.m.b.H., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 68189	A1	19830105	EP 1982-104996	19820608
EP 68189	B1	19841003		
R: BE, CH, DE, FR, GB, IT, LI, SE				
DE 3124008	A1	19830127	DE 1981-3124008	19810619
JP 58002312	A	19830107	JP 1982-105264	19820618
JP 03044088	B	19910704		
JP 03176065	A	19910731	JP 1990-263959	19901003
JP 04071926	B	19921117		
PRIORITY APPLN. INFO.:			DE 1981-3124008	A 19810619

OTHER SOURCE(S): MARPAT 98:166945

ED Entered STN: 12 May 1984

AB Water-swelling copolymers contain 5-30% 2-acrylamido-2-methylpropanesulfonic acid or its alkali or NH<sub>4</sub> salts, 70-95% acrylic or methacrylic acid or their salts and(or) acrylamide and(or) vinylpyrrolidone, and 0.01-2% of a bi- or polyfunctional crosslinker. The copolymers absorb body fluids containing electrolytes. Thus, acrylic acid 128, 2-acrylamido-2-methylpropanesulfonic acid 246, and H<sub>2</sub>O 965 g were adjusted to pH 4.1 with NH<sub>4</sub>HCO<sub>3</sub>, mixed with 0.37 g N,N'-methylenebisacrylamide, heated to 50°, and polymerized with 1.2 g azobisamidopropane-2HCl catalyst. The polymer gel was chopped, dried, powdered, and mixed with 0.5% Aerosil 200. The crosslinked copolymer absorbed 58 mL artificial urine/g, and 43 mL with a loading of 10 g/cm<sup>2</sup>.

IT 85481-67-0P

(preparation of, as body fluid absorbent)

RN 85481-67-0 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone, N,N'-methylenebis[2-propenamide] and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 85481-66-9

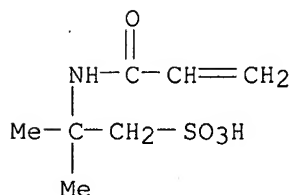
CMF (C<sub>7</sub> H<sub>13</sub> N O<sub>4</sub> S . C<sub>7</sub> H<sub>10</sub> N<sub>2</sub> O<sub>2</sub> . C<sub>6</sub> H<sub>9</sub> N O . C<sub>3</sub> H<sub>4</sub> O<sub>2</sub>)x

CCI PMS

CM 2

CRN 15214-89-8

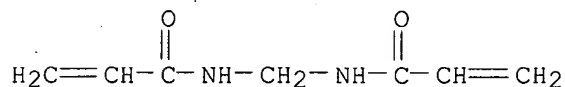
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CM 3

CRN 110-26-9

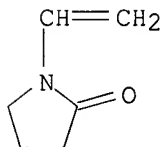
CMF C7 H10 N2 O2



CM 4

CRN 88-12-0

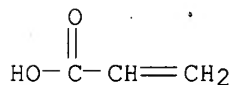
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



IC A61L015-00; C08F220-00

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 37

IT 85481-57-8P 85481-58-9P 85481-60-3P 85481-62-5P 85481-64-7P

85481-65-8P **85481-67-0P** 85481-68-1P 85481-70-5P

(preparation of, as body fluid absorbent)

L36 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:161730 HCAPLUS

DOCUMENT NUMBER: 98:161730

TITLE: Water-swellaible crosslinked copolymers and their use

INVENTOR(S): Engelhardt, Friedrich; Schmitz, Hermann; Kleiner, Hans Jerg; Lask, Helmut; Holst, Arno

PATENT ASSIGNEE(S): Cassella A.-G., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 68159	A1	19830105	EP 1982-104746	19820529
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R: DE, FR, GB, IT				
DE 3124454	A1	19830714	DE 1981-3124454	19810622
			<--	
JP 58005305	A	19830112	JP 1982-105563	19820621
			<--	
PRIORITY APPLN. INFO.:			DE 1981-3124454	A 19810622
			<--	

OTHER SOURCE(S): MARPAT 98:161730

ED Entered STN: 12 May 1984

AB The title polymers, useful as absorbents (especially for physiol. fluids), contain **olefins** 0-60, N-vinylamides 0-40, alkenamides 10-95, and crosslinking monomers [bisalkenamides or **ethylene** alkenylphosphonates] 0.001-2%. Thus, heating 950 g (ClCH<sub>2</sub>CH<sub>2</sub>O)<sub>3</sub>PO rearrangement mixture containing 50% ClCH<sub>2</sub>CH<sub>2</sub>P(O)(OCH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub> and 16% ClCH<sub>2</sub>CH<sub>2</sub>P(O)(OCH<sub>2</sub>CH<sub>2</sub>Cl)OCH<sub>2</sub>CH<sub>2</sub>P(O)(OCH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub> with 2 g soda for 4 h at 170-200° with distillation of C<sub>2</sub>H<sub>4</sub>Cl<sub>2</sub> and 4 h at 170-200° gave 484 g **ethylene** (Na vinylphosphonate) [85323-50-8]. Stirring this product 0.1, acrylamide 150, N-vinylpyrrolidone 40, 2-acrylamido-2-methylpropanesulfonic acid 10, NaOH 25.6, H<sub>3</sub>BO<sub>3</sub> 38.4, (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> 0.120, and H<sub>2</sub>O 560 g 8 h at 90° gave a polymer [85323-44-0] gel which was cut up, dried, and ground. This solid when left in synthetic blood absorbed 25.2 and 42.0 g/g after 0.5 and 3 h, resp., and in synthetic urine 30.5 and 40.8 g/g, resp., compared with 23.7, 29.8, 26.1, and 36.5, resp., for a com. acrylic polymer.

IT 85323-44-0 85323-47-3

(absorbent, for body fluids, manufacture of)

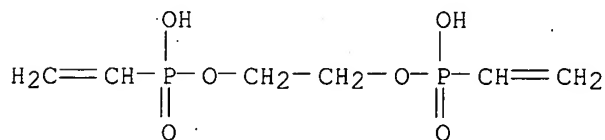
RN 85323-44-0 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 1,2-ethanediyl bis[sodium ethenylphosphonate], 1-ethenyl-2-pyrrolidinone and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 85323-50-8

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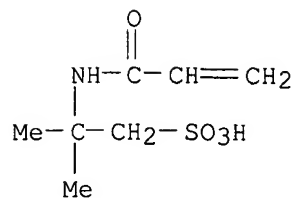


● 2 Na

CM 2

CRN 15214-89-8

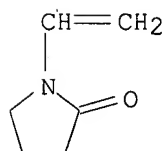
CMF C7 H13 N O4 S



CM 3

CRN 88-12-0

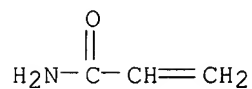
CMF C6 H9 N O



CM 4

CRN 79-06-1

CMF C3 H5 N O



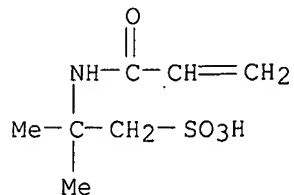
RN 85323-47-3 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with N-ethenyl-N-methylacetamide, N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

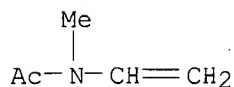
CMF C7 H13 N O4 S



CM 2

CRN 3195-78-6

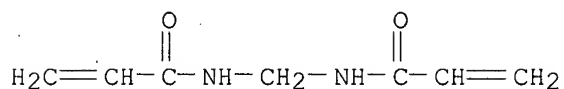
CMF C5 H9 N O



CM 3

CRN 110-26-9

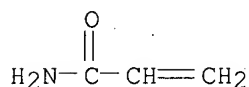
CMF C7 H10 N2 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



IC C08F220-56; A61L015-00

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 29

ST absorbent copolymer gel; vinylpyrrolidone copolymer gel absorbent;  
 acrylamide copolymer gel absorbent; propanesulfonic acid  
 acrylamidomethyl copolymer; vinylphosphonate **ethylene** ester  
 copolymer; crosslinker acrylamide copolymer absorbent

IT Crosslinking agents

(bisacrylamides and **ethylene** alkenyl phosphonates, for  
 acrylamide copolymer absorbents)

IT 70144-13-7 85323-44-0 85323-47-3 85323-48-4

85323-49-5 85323-52-0

(absorbent, for body fluids, manufacture of)

L36 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:91000 HCAPLUS

DOCUMENT NUMBER: 84:91000

ORIGINAL REFERENCE NO.: 84:14871a,14874a

TITLE: Hydrophilic acrylamido polymers

INVENTOR(S): Laskey, Richard A.

PATENT ASSIGNEE(S): Datascope Corp., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE



US 3929741	A	19751230	US 1974-488933	19740716
			<--	
JP 51019090	A	19760216	JP 1975-78555	19750624
			<--	
GB 1494803	A	19771214	GB 1975-27501	19750630
			<--	
DE 2531828	A1	19760205	DE 1975-2531828	19750716
			<--	
PRIORITY APPLN. INFO.:			US 1974-488933	A 19740716
			<--	

ED Entered STN: 12 May 1984

AB Polymers suitable for hydrogel contact lenses are prepared from 2-acrylamido-2-methylpropanesulfonic acid (I). Thus, a mixture of I 5, 2% aqueous ammonium persulfate 4, and ethylene dimethacrylate 0.014 g was kept 20 min at 55-60° to give a polymer [58374-76-8]. The hard, rigid, clear, colorless dried polymer gained 15,000% its weight in water or 3,000% its weight in an isotonic solution to provide a soft, optical clear, and colorless hydrated product.

IT 58374-72-4

(hydrogels)

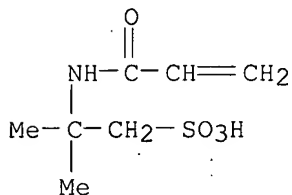
RN 58374-72-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

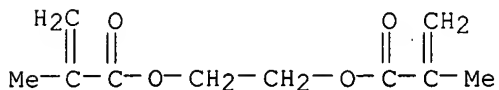
CMF C7 H13 N O4 S



CM 2

CRN 97-90-5

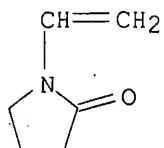
CMF C10 H14 O4



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC C08F; C08G

INCL 260079300M

CC 36-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 63

IT 51121-86-9 58374-67-7 58374-68-8 58374-70-2 58374-71-3

58374-72-4 58374-73-5 58374-74-6 58374-75-7 58374-76-8

58374-78-0 58374-79-1 58421-47-9

(hydrogels)

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FILE 'HCAPLUS' ENTERED AT 09:05:25 ON 15 NOV 2007

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SEL RN

FILE 'REGISTRY' ENTERED AT 09:05:38 ON 15 NOV 2007

L2 5 SEA ABB=ON PLU=ON (142-91-6/BI OR 170211-20-8/BI OR  
288155-97-5/BI OR 39464-66-9/BI OR 471908-73-3/BI)  
L3 STR  
L4 STR  
L5 12 SEA SSS SAM L3 AND L4  
L6 252 SEA SSS FUL L3 AND L4  
L7 1 SEA ABB=ON PLU=ON L6 AND L2  
L8 STR L3  
L9 15 SEA SSS SAM L4 AND L8  
L10 342 SEA SSS FUL L4 AND L8  
L11 2 SEA ABB=ON PLU=ON L10 AND L2  
SAV L10 BER371/A  
L12 STR  
L13 3 SEA SUB=L10 SSS SAM L12  
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SAV L14 BER371A/A

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E OLEFINS/CT  
L19 94408 SEA ABB=ON PLU=ON OLEFINS+PFT,NT/CT  
L20 0 SEA ABB=ON PLU=ON L17 AND L19  
L21 0 SEA ABB=ON PLU=ON L15 AND L19  
L22 35 SEA ABB=ON PLU=ON L17 OR L18 OR L20 OR L21  
L23 30 SEA ABB=ON PLU=ON L22 AND (1840-2003)/PRY,AY,PY  
L24 413 SEA ABB=ON PLU=ON L10  
L25 1 SEA ABB=ON PLU=ON L24 AND L19  
L26 QUE ABB=ON PLU=ON ALKENE? OR ETHYLEN? OR PROPYLEN? OR  
BUTYLEN?  
L27 15 SEA ABB=ON PLU=ON L15 AND L26  
L28 16 SEA ABB=ON PLU=ON L27 OR L25  
L29 13 SEA ABB=ON PLU=ON L28 AND (1840-2003)/PRY,AY,PY  
L30 41 SEA ABB=ON PLU=ON L22 OR L29  
L31 16 SEA ABB=ON PLU=ON L26 AND L30  
L32 41 SEA ABB=ON PLU=ON L31 OR L30  
L33 12 SEA ABB=ON PLU=ON L15 NOT L32  
L34 11 SEA ABB=ON PLU=ON L33 AND (1840-2003)/PRY,AY,PY  
L35 0 SEA ABB=ON PLU=ON L34 AND PREP/RL  
L36 41 SEA ABB=ON PLU=ON L32 OR L35